

**Clean Air Act Designation Process:
Identifying Opportunities**



**Maeve S. R. Mason
Bureau of Air Quality
SC Department of Health and Environmental Control
March 4, 2013**

**Clean Air Act Designation Process:
Identifying Opportunities**



**Maeve S. R. Mason
Bureau of Air Quality
SC Department of Health and Environmental Control
March 4, 2013**

Table of Contents

Introduction.....	3
Federal Air Pollution Control Laws and Programs	3
Problem Statement	4
Literature Review.....	5
Clean Air Act Reform.....	5
Designation Process	8
Consultation	9
Transparency.....	10
Consistency	10
Methodology	12
Findings.....	13
Timing.....	14
Transparency & Consultation	16
Consistency	17
Next Steps	18

Figures

Figure 1: Designation Process - Effectiveness.....	13
Figure 2: Designation Process - Frequency and Type of Communication	15

Appendices

Appendix A: Whitfield's CAA Forums: SC Invitation and Remarks	
Appendix B: SESARM SIP Summit Resolution	
Appendix C: ECOS-NACAA-EPA: FCAP 2012 PM NAAQS	
Appendix D: CAA Designation Survey	

Introduction

Federal Air Pollution Control Laws and Programs

In 1955 the first federal air pollution control law was promulgated primarily to fund research into the scope and sources of air pollution. Since that time, air quality management has evolved in many ways to include the first Federal Clean Air Act (CAA or Act) in 1963. However, it wasn't until 1970 that the previous iterations were amended creating what some consider to be the first modern day CAA. The 1970 amendments increased authority of the newly created Environmental Protection Agency (EPA) and established the basic structure of our nation's present air quality management program. This Act authorized the establishment of National Ambient Air Quality Standards (NAAQS), the New Source Performance Standards (NSPS) for new and modified stationary sources, the establishment of National Emission Standards for Hazardous Air Pollutants (NESHAPs), increased enforcement authority, and authorized requirements for the control of motor vehicle emissions. The 1970 CAA also established requirements for State Implementation Plans (SIPs) to achieve the NAAQS and address air quality concerns.

In June 1989, then President Bush proposed significant revisions to the CAA. Based on Congressional proposals, the President proposed legislation designed to address three major issues: acid rain, urban air pollution, and toxic air emissions (Overview: The Clean Air Act Amendments of 1990, 2013). The resulting 1990 amendments were enacted in large part to deal with urban air pollution or NAAQS. The NAAQS are air quality standards set by the EPA for six "criteria pollutants" which are among the most

harmful to public health and the environment. With the 1990 amendments, EPA is required to set NAAQS for each of the criteria pollutants and review these standards once every five years to determine if they are appropriate or if new standards are needed to protect public health.¹ In addition, these amendments clarify how areas would be designated and redesignated as meeting or “attaining” the NAAQS. They also allow EPA to define the boundaries of a “nonattainment” area. A nonattainment area is the geographical area whose air quality has been found to not meet the NAAQS designed to protect public health.²

In South Carolina, the Department of Health and Environmental Control (herein referred to as DHEC) is the state agency charged with the development of the SIP. The mission of DHEC is to protect and promote the health of the public and the environment, and its role in implementing the CAA in South Carolina furthers that mission. Much of the progress that the State has made in addressing air quality concerns is due to parts of the CAA that work well, such as the Acid Rain Program, and the requirement to remove lead from gasoline.

Problem Statement

However, because it was last amended in 1990, much of the CAA is no longer valid or relevant, especially in terms of its SIP process. This leaves states and regulated industry members to comply with outdated CAA requirements that do little to actually affect air quality improvement. In their present form, the CAA as a whole and the SIP process in general, are relics of another time which cannot be maintained in practice, and

¹ 42 U.S.C. § 7409 (2011).

² See <http://www.epa.gov/oaqps001/greenbk/define.html>

are long overdue for an overhaul in order to better address the environmental and economic resource issues of today (Schoenbrod et al., 2009).

Literature Review

Clean Air Act Reform

Since the enactment of the 1990 CAA amendments, a number of task forces, work groups and studies have looked at the air quality management system and made recommendations for improvements. These efforts include:

- On January 19, 1989, a work group convened by the EPA released a report in the Federal Register on streamlining the SIP process (54 FR 2214, January 19, 1989).
- On September 30, 1993, then President Clinton issued Executive Order 12866 “Regulatory Planning and Review” to reform and make more efficient the Federal Government’s regulatory process (Clinton, 1993).
- In January 2004, the National Research Council released a report entitled “Air Quality Management in the United States” in which it finalized its recommendations on needed SIP process improvements (Committee on Air Quality Management, 2004).
- In 2005, the Air Quality Management Work Group, established by the Clean Air Act Advisory Committee (CAAAC), released its report “Recommendations to the Clean Air Act Advisory Committee: Phase I and Next Steps.”
- In 2007, North American Research Strategy for Tropospheric Ozone (NARSTO) was charged with assessing the technical challenges of transitioning from a

pollutant-by-pollutant approach to air quality management to the risk-based, multi-pollutant approach suggested by the National Research Council in 2004.

- In June 2007, the Air Quality Management Work Group submitted finalized Phase II Recommendations to the CAAAC.
- In January 2008, the CAAAC released a final report developed by its Vision and Goals Work Group entitled “A Vision and Guiding Principles for the National Air Program.”
- In 2010, the National Association of Clean Air Agencies (NACAA), Environmental Council of States (ECOS), and EPA joined together in a cooperative initiative to make the SIP process more efficient and effective (Kruger, 2011).
- In 2011, House Energy and Power Subcommittee Chairman Ed Whitfield (Republican from Kentucky) began a series of CAA Forums to provide an opportunity for members of Congress to hear a broad range of perspectives from experts about their experiences in implementing the CAA (U.S. House, Energy and Commerce Committee, 2012).³

Through the years, recommendations have been made and substantive dialogue has taken place between EPA and the states, and while this dialogue is continuing, some states feel more substantial progress on implementing the needed changes are necessary.

A significant coalition of states, originating in the Southeastern United States, identified several issues, which have been historically encountered during the development of SIPs under the CAA. These states believe that resolution of these issues

³ See Appendix A for more information, including South Carolina’s invitation and remarks.

would reduce duplication of effort, streamline plan development and submittal, and dramatically increase the efficiency of the air quality management process. The coalition recognizes that many of these issues are not new and that some have been identified by other groups. Although EPA has taken steps to mitigate some issues, serious gaps and significant problems remain. Effective resolution of these problems has become even more important as resource demands increase and available resources stay constant or decrease.

As a result, in September 2009, DHEC held a “SIP Summit” in Columbia, South Carolina to discuss the successes of the CAA and to begin identifying improvements to the air quality management and SIP processes. Attending this summit were a host of individuals active in air quality management to include: environmental commissioners; state and local air directors and air program representatives; a former environmental commissioner and current member of the CAAAC; representatives from local government, industry and environmental nonprofits; and, representatives from EPA Region 4⁴ (including the acting Regional Administrator and Acting Deputy Regional Administrator) and Office of Air Quality Planning and Standards.

At the SIP Summit, states signed a resolution⁵ which demonstrated their commitment to maintaining and improving air quality and to seeking a more efficient, cost-effective, and common sense approach to air quality management in the United States. Later, a large component of this coalition, known as the Southeastern States Air Resource Managers, Inc (SESARM)⁶ signed a September 9, 2010, letter to EPA Assistant

⁴ See <http://www.epa.gov/aboutepa/region4.html> for a description of EPA Region 4.

⁵ See Appendix B

⁶ See <http://www.metro4-sesarm.org/> for a description of SESARM.

Administrator Gina McCarthy, calling for SIP reforms and improvements in the air quality management process.⁷

While the literature and aforementioned SESARM resolution outline several key components of necessary reforms, this research is focused on one element of these reforms – the CAA designation process. The designation process has long been considered a fundamental aspect of the current air quality management strategy. The Congressional Research Service prepared a report for the members and committees of Congress in October 2012 stating, “The designation of geographical areas unable to meet the NAAQS is a critical step in NAAQS implementation, and historically has been an issue of concern and debate among EPA, states and tribes, various stakeholders, and some Members of Congress” (Esworthy, 2012).

Designation Process

In a major departure from the prior law, the 1990 CAA Amendments group nonattainment areas into classifications based on the extent to which the NAAQS is exceeded, and establish specific pollution controls and attainment dates for each classification. The CAA consists of six sections, known as Titles, which direct EPA to establish NAAQS and provide for EPA and the states to implement, maintain, and enforce these standards through a variety of mechanisms (Clean Air Act, 2013).

Title I of the CAA sets out the purpose of enhancing the Nation’s air quality to promote public health through the development of regional air pollution prevention and control programs along with providing technical and financial assistance to state and local governments for the execution of air pollution prevention. Specifically, CAA

⁷ See SESARM, 2010.

Section 107 establishes the requirement for developing and promulgating designations for the NAAQS.

However, as is part of the overall concern with the current CAA, the current text at Section 107 is fairly limited in terms of how it defines the specific aspects of how this process will proceed. Several key areas of concern are: the consultation that takes place between EPA (who designates areas and approves the SIPs) and the states (that recommend designations and ultimately develop the SIPs), the degree of transparency involved in EPA's decision making process, and the lack of consistency within EPA's approach to designating areas.

Consultation

CAA Section 107(c) states, "The Administrator shall, within 90 days after December 31, 1970, after consultation with appropriate state and local authorities, designate as an air quality control region any interstate area or major intrastate area which he deems necessary or appropriate for the attainment and maintenance of ambient air quality standards..." Neither section 107, nor any other text of the CAA defines consultation.

The EPA does define consultation in Step 4 of its *Guidance to Regions for Working with Tribes during the National Ambient Air Quality Standards (NAAQS) Designations Process*, "Consultation is generally defined as a process of meaningful communication and coordination between an EPA representative who is considered a decision-maker for the Agency (the Associate Division Director or above) and tribal officials or their designees." The EPA further explains this as an opportunity "to engage in a *technical dialogue* [emphasis added] regarding the recommendations." Step 10 of the

same memo goes on to state, “When requested, consultation should be conducted after the 120-day letter is sent. This is especially important where a tribe disagrees with EPA’s intended designation” (Page, 2011). Despite this clear guidance from EPA, state, local, and tribal entities have not experienced this degree of consultation in recent designation decisions.⁸

Transparency

On January 18, 2011, building upon Executive Order 12866, President Obama signed Executive Order 13563, committing the federal government to improving transparency.⁹ In particular this order specifies in *Section 2, Public Participation*, that “...regulations shall be based, to the extent feasible and consistent with law, on the open exchange of information and perspectives among State, local, and tribal officials, experts in relevant disciplines, affected stakeholders in the private sector, and the public as a whole.” Moreover, this section references the requirement that rulemaking dockets include relevant scientific and technical findings. Despite this order (with the exception of individual guidance documents for each of the NAAQS used to help states in developing boundary recommendations which are often too late in coming to the states to be of any use in the process), EPA has not published any policies or procedures which specify how exactly designation decisions are made.

Consistency

From the time the EPA was created in 1970, it has been divided into ten (10) regions (Ruckelshaus, 1970). President Nixon signed executive order 1110.2 on

⁸ See 2008 Ozone NAAQS Designations, issued May 21, 2012 (77 FR 30088).

⁹ See Obama (2011).

December 4, 1970, setting up these regions as nearly autonomous sub-agencies. These regions are responsible for the execution of EPA's programs within several states and territories (About EPA, 2013). Historically, regional administrators have served as a bridge between EPA headquarters and the state and local governments (Bullard, 2009). Despite attempts on EPA's part, inconsistency in communication and decision making across these regions is prevalent. In fact the only successful case in which the Court remanded a designation decision back to EPA, stemmed from EPA's inconsistent application of the factors used in its decision.¹⁰

Moreover, in failing to define certain key terms like 'contribute' and 'significantly' any efforts towards consistent decision making in the designation process are difficult at best. The word "contribute" in CAA Section 107(d)(1)(A)(i) is ambiguous (Flannery, 2009). EPA has never defined or established a bright line test for what is considered to contribute to a nonattainment area and courts have shown great deference to EPA's judgment in this regard.

Compounding these issues is the fact that EPA has historically not used the classification scheme outlined in the CAA to include the following distinctions: nonattainment, attainment, or unclassifiable.¹¹ Contrary to Congressional intent, EPA's practice has been to designate areas that meet the NAAQS as "unclassifiable/attainment." It has only designated areas as "attainment" if they have been redesignated from nonattainment.¹² EPA has noted informally that there is no legal distinction between unclassifiable and attainment, so there is no reason to differentiate the two. However,

¹⁰ See *Catawba Co. vs. EPA*, 571 F.3d 20 (D.C. Cir. 2009).

¹¹ 42 U.S.C. § 7407(d)(1)(a) (2011).

¹² See for example the South Carolina designations for the 1997 Ozone Standard at 40 CFR § 81.341 (2011).

many states disagree. These distinctions outlined in the CAA have recently proven important as more and more areas are being designated strictly “unclassifiable” based on limited to no ambient air quality monitoring data.

Methodology

In order to assess the extent to which the aforementioned concerns are shared and in order to establish a precedent for more localized support for CAA reforms, this research set out to solicit the opinions of other state and local air agencies. In particular, this research focused on identifying the level of support for the current CAA Section 107 text outlining the process for designating areas which in turn sets in motion a SIP development process that has significant impacts on the citizens of a particular state.

To evaluate this level of support, a survey was developed and shared with both state/local air program staff. The survey itself consisted of 10 questions (both closed and open-ended) aimed at soliciting opinions on the experiences of states having participated in the designation process (see Appendix D for a copy of the survey).

A participant list was developed such that individuals with the best working knowledge of the designation process itself were included. Based primarily upon ease and availability this research sought the participation of an existing group of air program planning staff known as the Metro 4 and SESARM Planning/SIP Development workgroup. SESARM states are in large part those existing in EPA Region 4 (southeastern U.S.). The Planning/SIP Development workgroup’s activities include providing administrative support to agencies, developing regulations and other components of implementation plans, and assessing the effectiveness of the programs.

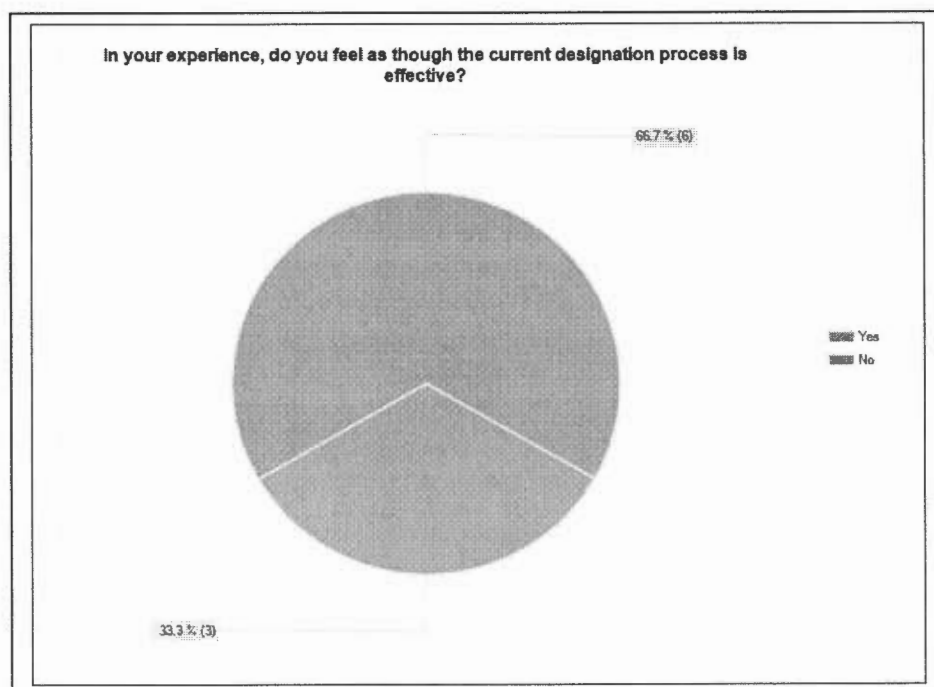
This group consists of approximately 30 individuals representing the eight (8) SESARM member states (SESARM, Planning and SIP Development, 2013).

An electronic mail message was sent to this group on October 29, 2012, requesting participation in taking the aforementioned survey. Using an online service provider, respondents were asked to complete the survey in two weeks. A follow-up reminder message was sent on November 13, 2012. Of the list of approximately 30 potential survey participants, nine (9) completed the survey. While the survey participants were kept anonymous, based on specific written responses received, at least 4 of the 8 member states were represented.

Findings

As Figure 1 demonstrates, of those completing the survey, 67 percent felt as though the designation process was ineffective.

Figure 1: Designation Process - Effectiveness



Several reasons were given that support the preliminary concerns discussed in the literature review to include: consultation, transparency, and consistency. The push for “more consultation when EPA disagrees with a State’s nonattainment boundary recommendation” is further supported by a recent Designation Issue Paper developed in part by staff involved with state air programs actively participating in the NACAA/ECOS/EPA SIP Reform Particulate Matter (PM) Full Cycle Analysis Project (FCAP).¹³ However, others felt the fundamental problem they faced, “is EPA’s philosophy that large multi-county NAAs are necessary to address the nonattainment problem. Most states have the authority to require installation of controls necessary to attain a NAAQS, regardless of the designation status of the area.”

Timing

While most participants (67 percent) felt as though 120 days was sufficient time to respond to EPA’s modifications to the proposed boundary recommendation submitted by the state/local air program, several respondents specifically discussed other concerns related to timing and consultation. “Timeliness is what we consider to be the key issue with the designation/redesignation process.” Several respondents remarked that they felt as though the statutory timing for reviewing the NAAQS ultimately lead to problems with the designation process. “Litigation has delayed the implementation of revised standards. Due to these delays, states barely begin implementing programs to address the revised standard before the 5-year mandatory review comes up and a potential new revision to the standard is proposed.”

¹³ See Appendix C

To the issue of timing and consultation, respondents were asked to explain the typical type and frequency of their communication with EPA during the designation process. As Figure 2 illustrates the majority of program areas only communicated with EPA one or two times during the entire 120-day designation process.

Figure 2: Designation Process - Frequency and Type of Communication

Clean Air Act Designation Process					
During the 120 day process prior to final designations, please indicate how often you communicated with EPA using the following methods?					
Number of Times					
Answer Options	0 Times	1-2 Times	3-4 Times	5 or More Times	Response Count
Phone	1	3	2	3	9
Face to Face	3	6	0	0	9
Email	1	3	1	4	9

Based on the responses summarized in Figure 2, it is not clear who (whether EPA or the states themselves) may have initiated these types of communication or whether any requests for communication were denied. An example of this limited interaction during the designation process comes by way of many participants' recent experience with the boundary recommendations for the 2008 8-hour ozone NAAQS. Given the timeframe to react to EPA's designation is defined in statute as 120 days, the issue of timing is considered to be of critical importance. "The EPA published its decision nearly a month before the deadline to issue the 2008 8-hour ozone NAAQS designations which resulted in very little time to consider critically important back trajectory and other scientific data submitted by DHEC. We feel that this fact alone provides a basis for reconsideration of the designations, as published" (Reece, 2012). In fact, many states within the southeast and participants in this survey went on to petition the EPA Administrator to reconsider

the final 2008 8-hour ozone designations. Many included timing or concerns related to the EPA's acceptance of data certified after the close of the comment period as a rationale for their decision.¹⁴

Transparency & Consultation

At least one of the survey respondents cited transparency as a large contributor to the ineffective designation process, "There is not enough transparency in the process. EPA puts out guidance documents that indicate which factors to consider but no specifics on how to consider these factors. EPA's technical analyses included in their 120-day responses also do not provide a clear indication on how EPA used these factors in determining the areas included in their response."

Compounding this issue of transparency in its processes is the EPA's use of Exemption 5 of the Freedom of Information Act Guide.¹⁵ As figure 2 indicates, it is typical for states and EPA to communicate during the 120-day consultation process for determining designations. However, several states have voiced frustration at what they perceive of as a lack of meaningful dialogue due in part to EPA's staff response that the process itself is 'deliberative' (DHEC phone call on May 15, 2012). While staff understand the purpose behind shielding some deliberative processes from public disclosure, this policy should not logically permit EPA to reject a State's submission of scientific data and technical analysis without disclosing any countervailing EPA data, information, or analysis relied upon to question the State's submitted facts and/or analysis.

¹⁴ See <http://www.epa.gov/glo/designations/2008standards/petition.htm>

¹⁵ See Exemption 5 of Freedom of Information Act Guide, 2007.

Consistency

Of the aforementioned 67 percent of survey participants who felt that the designation process was ineffective, respondents were asked to explain how they believed the current process could be improved. One particular respondent felt that the process lacked consistency. “The attitude at EPA headquarters [is] that they must apply national consistency across the nation. NO region is consistent with another and no non-attainment area is enough alike to be considered on this basis. Each non-attainment area must be considered individually, on its own merits and complexity.” South Carolina concurs with this thinking and the recent EPA final 2008 ozone designation decision supports this claim in that this decision offered diametrically opposed findings ultimately creating a SC attainment area inside a surrounding non-attainment zone, despite having little data to support this decision.¹⁶

This general lack of consistency in applying the factors used to consider boundary recommendations leads to an entirely conceivable opinion that despite whatever scientific argument is presented, the EPA (and any subsequent court ruling) could find that any single source of emission could contribute to remote violations and thereby justify virtually any non-attainment area designation. Yet, such a position does not seem prudent or productive for the EPA. If a non-attainment area can never definitively demonstrate compliance and subsequently achieve attainment status, then there is little incentive for states and local jurisdictions to take remedial actions.

¹⁶ See Reece, 2012

Next Steps

While projects like the NACAA/ECOS/EPA SIP Reform Workgroup and the associated PM FCAP project are a step forward in efforts towards reformation (in part because they serve as evidence that stakeholders acknowledge and agree problems in the status quo - such as untimely guidance and delays in SIP approvals – do in fact exist), the results of this survey indicate that perhaps these efforts haven't gone far enough. While many state and local air programs are encouraged that national efforts are underway to examine the importance of reforms, many of these are aimed at identifying opportunities that exist within the current statutory framework. Still others, including South Carolina, are also committed to efforts like the aforementioned Whitfield Forums and SIP Transformation Task Force,¹⁷ based in large part on their willingness to examine larger more holistic CAA reforms. However, despite this commitment, supporters of CAA reform have expressed concerns that the current political climate is not conducive to this type of sweeping reform (Inside EPA, 2012). It comes as no surprise that this will ultimately take bipartisan collaboration (The Bakersfield Californian, 2012).

Therefore perhaps the best strategy to effect change is a grassroots approach. The demonstrated commitment from Region 4 state and local air programs provides evidence that despite barriers present at the national level; many are still fully committed to the reform efforts underway. Perhaps a concentrated grassroots effort led by this region is what it will ultimately take to engage and activate reforms at all levels. Opportunities do exist; like the recent announcement that EPA Region 4 has been named the lead air

¹⁷ See <http://www.sipreform.com/>.

region.¹⁸ However, as this study demonstrates more research into the opinions and perspectives of state/local air programs across the nation needs to be a part of the process moving forward. Such that ultimate support for reform efforts can include: the FCAP SIP Process Work Group and their commitment to easing the burdens of SIP planning within the confines of the current CAA statute; the Region 4 State Air Director's commitment to continue to seek opportunities for reforms that are made possible by existing ambiguity in the statutory language (specifically the designation process); and a solid backing for a continued push towards sweeping reforms at the national level via the SIP Transformation Task Force, the Whitfield Forums, and the Clean Air Act Advisory Committee.¹⁹ "To break the old routines, and the logjams that they have produced, leadership is essential—from the business community, the environmental advocacy community, and Congress, and above all from the president and the public" (Schoenbrod et al, 2009).

¹⁸ See <http://www.epa.gov/regional/leadregionprocess.htm>

¹⁹ See <http://www.epa.gov/air/caaac/>.

Works Cited

- “About EPA,” last accessed January 18, 2012,
<http://www.epa.gov/aboutepa/index.html#tabsmenu=3>
- Air Quality Management Subcommittee. “Air Quality Management Subcommittee Phase II Recommendations.” *U.S. Environmental Protection Agency*. June 2007. Last accessed January 18, 2013, <http://www.epa.gov/air/caaac/aqm.html>
- The Bakersfield Californian. “Time to revamp the Clean Air Act.” December 1, 2012. Last accessed January 23, 2012,
<http://www.bakersfieldcalifornian.com/opinion/our-view/x1801510372/Time-to-revamp-the-Clean-Air-Act>
- Bullard, Robert. “Time for a New EPA Administrator.” September 9, 2009. Last accessed January 18, 2013, <http://www.opednews.com/articles/Time-for-New-Type-of-EPA-R-by-Robert-Bullard-090831-92.html>
- Clean Air Act. Last accessed January 18, 2013, <http://www.epa.gov/agriculture/lcaa.html>
- Clean Air Act Advisory Committee. “A Vision and Guiding Principles for the National Air Program.” *U.S. Environmental Protection Agency*. 2009. Last accessed February 1, 2013, http://www.epa.gov/air/caaac/vision/CAAACVGfinal_02-09.pdf
- Clinton, Bill. “Regulatory Planning and Review.” Executive Order 12866 of September 30, 1993, (58 FR 51735). Last accessed January 18, 2013,
<http://www.plainlanguage.gov/populartopics/regulations/eo12866.pdf>
- Committee on Air Quality Management in the United States, National Research Council. “Air Quality Management in the United States.” *The National Academies Press*. 2004. Last accessed January 18, 2013,
<http://www.nap.edu/openbook.php?isbn=0309089328>
- Esworthy, Robert. “2006 National Ambient Air Quality Standards (NAAQS) for Fine Particulate Matter (PM_{2.5}): Designating Nonattainment Areas.” Congressional Research Service, October 25, 2012.
- Flannery, David. “DC Circuit Upholds US EPA’s PM 2.5 Nonattainment Designations,” American College of Environmental Lawyers. July 17, 2009. Last accessed January 24, 2013,
<http://www.acoel.org/post/2009/07/17/DC-CIRCUIT-UPHOLDS-US-EPAS-PM-25-NON-ATTAINMENT-DESIGNATIONS-.aspx>
- Freedom of Information Act (FOIA), 5 U.S.C.A. Section 552 (West 2007).

Inside EPA, Clean Energy Report. "Key Lawmaker Says Clean Air Act Reforms Hinge On EPA-State Consensus." August 1, 2012. Last accessed January 24, 2013, <http://cleanenergyreport.com/Clean-Energy-General/Congress-Watch/key-lawmaker-says-clean-air-act-reforms-hinge-on-epa-state-consensus/menu-id-1003.html>

Kruger, Nancy. "NACAA-EPA-ECOS SIP Reform Workgroup." June 8, 2011. Last accessed January 18, 2013, http://www.epa.gov/air/caaac/pdfs/2011_06_kruger.pdf

NARSTO. "Multi-Pollutant Accountability." *NARSTO - Better Air Quality for North America*. Last accessed January 18, 2013, http://www.narsto.org/multi_pollutant_accountability

Obama, Barack. "Improving Regulation and Regulatory Review." Executive Order 13563 of January 18, 2011. Last accessed February 17, 2012, <http://www.whitehouse.gov/the-press-office/2011/01/18/improving-regulation-and-regulatory-review-executive-order>

"Overview: The Clean Air Act Amendments of 1990." Last accessed January 18, 2013, <http://www.epa.gov/air/caa/overview.txt>

Page, Stephen. "Guidance to Regions for Working with Tribes during the National Ambient Air Quality Standards (NAAQS) Designations Process," *U.S. Environmental Protection Agency*. December 20, 2011. Last accessed January 24, 2013, http://www.epa.gov/air/tribal/pdfs/12_20_11-Guidance-to-Regions-for-Working-with-Tribes_NAAQSDesignations.pdf

U.S. House, Energy and Commerce Committee. Clean Air Act Forums, Hearings July 31, August 2, and November 29, 2012, Washington.

Recommendations to the Clean Air Act Advisory Committee. "Recommendations to the Clean Air Act Advisory Committee: Phase I and Next Steps." *U.S. Environmental Protection Agency*. Jan. 2005. Web. 06 Aug. 2010. Last accessed January 24, 2013, <http://www.epa.gov/air/caaac/aqm.html>

"Region 7 SIP Kaizen Event." *Environmental Council of the States*. 2010. Last accessed August 6, 2010, <http://www.ecos.org/section/committees/air>

Reece, Myra, Bureau Chief, Department of Health and Environmental Control (DHEC) letter to Gina McCarthy, Assistant Administrator, Office of Air and Radiation, EPA, July 20, 2012, "SC Petition for Reconsideration: 2008 Ozone NAAQS Designation."

Ruckelshaus, William D. "Initial Organization of the Environment Protection Agency." Executive Order 11102 of December 4, 1970. Last accessed January 18, 2013,

http://www.epa.gov/aboutepa/history/org/origins/1110_2.html

Schoenbrod, D., Richard B. Stewart. Katrina M. Wyman. "Breaking the LogJam: Environmental Protection that Will Work." Yale University Press, 2009.

Southeastern States Air Resource Managers Inc. (SESARM), Planning and SIP Development. Last accessed January 18, 2013, <http://www.metro4-sesarm.org/planning.asp>

Southeastern States Air Resource Managers Inc. (SESARM) letter to Gina McCarthy, Assistant Administrator, Office of Air and Radiation, EPA, September 9, 2010, "Improving the Current Air Quality Management and SIP Processes."

"Streamlining SIP Process," 54 Federal Register 2214 (January 19, 1989).

The Title V Task Force. "Final Report to the Clean Air Act Advisory Committee on the Title V Implementation Experience." *U.S. Environmental Protection Agency*. April 2006. Last accessed January 18, 2013, <http://www.epa.gov/air/oaqps/permits/taskforce.html>

Appendix A
Senator Whitfield's Clean Air Act Forums
SCDHEC Invitation and Remarks

FRED UPTON, MICHIGAN
CHAIRMAN

HENRY A. WAXMAN, CALIFORNIA
RANKING MEMBER

ONE HUNDRED TWELFTH CONGRESS
Congress of the United States
House of Representatives
COMMITTEE ON ENERGY AND COMMERCE
2125 RAYBURN HOUSE OFFICE BUILDING
WASHINGTON, DC 20515-6115

Minority (202) 225-2527
Minority (202) 225-3841

July 10, 2012

The Honorable Robert King
Deputy Commissioner
South Carolina Department of
Health and Environmental Control
2600 Bull Street
Columbia, SC 29201

Dear Deputy Commissioner King:

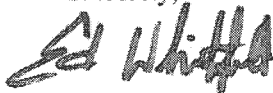
Thank you for agreeing to participate in a forum entitled "State, Local, and Federal Cooperation in the Clean Air Act" on Tuesday, July 31, 2012, at 2:00 p.m. in the Capitol Visitor Center.

The forum will provide an opportunity for members of Congress to hear a broad range of perspectives from experts about their experiences in implementing the Clean Air Act. I welcome your views on the implementation of the Clean Air Act and in particular the cooperation and collaboration between state, local and federal air quality managers to prevent and control air pollution.

Participants are not required to submit a statement in advance of the forum. However, to ensure that there is opportunity for a broad range of views to be expressed, we have prepared questions for participants to answer prior to the event. Attached please find questions to be answered prior to your participation in the forum. A response by Friday, July 27, 2012, is requested and can be emailed to our Legislative Clerk at Allison.Busbee@mail.house.gov.

If you have any questions concerning your participation, please contact Maryam Brown or Heidi King of the Energy and Commerce Committee staff at (202) 225-2927.

Sincerely,



Ed Whitfield
Chairman
Subcommittee on Energy and Power

Clean Air Act Forum:
State, Local, and Federal Cooperation under the Clean Air Act
July 31, 2012 and August 2, 2012

Participant Questions

1. In your agency's experience implementing the Clean Air Act (CAA), what is working well?
What is not working well?
2. Do state and local governments have sufficient autonomy and flexibility to address local conditions and needs?
3. Does the current system balance federal, state, and tribal roles to provide timely, accurate permitting for business activities, balancing environment protection and economic growth?
4. Does the CAA support a reasonable and effective mechanism for federal, state, tribal and local cooperation through State Implementation Plans? How could the mechanism be improved?
5. Are cross-state air pollution issues coordinated well under the existing framework?
6. Are there other issues, ideas or concerns relating to the role of federalism under the CAA that you would like to discuss?

**Response to Questions from the
House Energy and Power Subcommittee Forum:
"State, Local, and Federal Cooperation in the Clean Air Act"
from the South Carolina Department of Health and Environmental Control**

1. In your agency's experience implementing the Clean Air Act (CAA), what is working well? What is not working well?

Since the enactment of the Clean Air Act over four decades ago, significant progress has been made in improving air quality across the country. Our mission at the South Carolina Department of Health and Environmental Control (S.C. DHEC) is to protect and promote the health of the public and the environment, and our role in implementing the Clean Air Act in South Carolina furthers that mission. To accomplish the air quality improvements that have occurred to date, strong working relationships between EPA headquarters, the EPA regional offices and the state, local and tribal air quality programs have been critical. Trust and timely communication on the very difficult and technical issues are critical components of implementing successful solutions. I appreciate the excellent working relationships and partnerships that have been formed with EPA, in particular EPA Region 4, with local governments and air coalitions in South Carolina and with other states, tribes and local air programs to help accomplish air quality goals.

However, because the Clean Air Act has not been updated since 1990, many of the scientific and technical advances that have been realized can't be taken advantage of when meeting the specific requirements that have been established. In addition, many of the resulting policies and procedures are burdensome and don't result in air quality improvements.

We are particularly concerned about the state implementation plan (SIP) process and in 2009, southeastern states and community stakeholders held a "SIP Summit." The SIP Summit produced a resolution calling for specific reforms to air quality management and the SIP process,¹ some of which would require amending the Clean Air Act. When challenged with our concerns, EPA formed a SIP Process Improvement Workgroup and has been working on addressing issues and concerns since late 2010. Unfortunately, the current Clean Air Act framework doesn't allow anything but minor changes to these requirements, such as reducing the number of paper copies of SIP submittals that states need to submit to EPA.² As EPA's new standards become more and more stringent, meeting these standards will become extremely difficult and minor changes to the EPA requirements and processes are insufficient for the air quality management challenges we face.

The following are challenges with the framework of the Clean Air Act which impair our ability to manage air quality in the most efficient manner:

¹ Letter and attachment from Southeastern States Air Resource Managers Inc. (SESARM) to Gina McCarthy, Assistant Administrator, Office of Air and Radiation, U.S. EPA (Sept. 9, 2010), Improving the Current Air Quality Management and SIP Processes.

² Memorandum from Janet McCabe, U.S. EPA, on Regional Consistency for the Administrative Requirements of State Implementation Plan Submittals and the Use of "Letter Notices," (April 6, 2011).

- The Clean Air Act regulates air quality in a pollutant-by-pollutant manner. A paradigm shift to a comprehensive multi-pollutant air quality management approach is necessary to combine pollution-control efforts and maximize resources.³
- The absence of a streamlined and clear approach for developing and approving SIPs leaves states spending time on process for the sake of process.
- Rigidity in SIP deadlines has made it easy for groups to petition EPA and negotiate settlement agreements.⁴ Regulation-by-litigation reduces the role of states and EPA and has the result of privileging petitioner's goals over those of other stakeholders, leaving the vital role of policymaking to the courts. Another problem with this approach is that the agreed-upon settlement agreement or consent order deadlines often do not allow EPA enough time to write quality regulations. With abbreviated schedules, EPA has neither the time nor the resources to involve states and other stakeholders in a meaningful way in the rulemaking process, or do the necessary work to develop implementation tools.
- There are insufficient provisions for input from states, which are responsible for implementation of the National Ambient Air Quality Standards (NAAQS), in the development of air quality standards.

2. Do state and local governments have sufficient autonomy and flexibility to address local conditions and needs?

We appreciate the role of federal rules in providing some measure of uniformity across the nation, but the current Clean Air Act and the EPA established processes stifle flexible local approaches that often go beyond minimum requirements to protect public health and the environment. We continue to work with EPA to approve what makes sense for local areas. Unfortunately, convincing EPA that we shouldn't have to do something just because another state has or because they have a box that has to be checked can be difficult and time-consuming. It is also extremely frustrating when EPA responds that we have to do something because the Clean Air Act requires it.

Our Agency is not limited to implementing federal mandates only, and with proper oversight, and accountability to our Board and Legislature, we can implement effective alternatives. Using this flexibility, we have worked with sources to develop voluntary emission reductions to assure attainment of the NAAQS. To cite one specific example, we negotiated a memorandum of understanding with a coal-fired power plant that reduced its emissions prior to the designations for the 2010 Sulfur Dioxide (SO₂) NAAQS.⁵ In many cases, our experience has been that the Clean Air Act does not readily provide states with the ability to adopt local solutions to local problems, a core value of our Agency. Instead, states are often met with roadblocks and forced to expend limited State resources complying with procedural requirements that lack public health and environmental benefits. The Clean Air Act's prescriptive approach limits local, more efficient strategies.

³ National Research Council, *Air Quality Management in the United States* (2004).

⁴ EPA required "Infrastructure SIPs" that essentially reaffirm existing SIP content as a result of a March 4, 2004, Notice of Intent to Sue from Earthjustice. See Completeness Findings for Section 110(a) State Implementation Plans Pertaining to the Fine Particulate Matter (PM_{2.5}), 73 Fed. Reg. 62902 (October 22, 2008).

⁵ June 23, 2011, Memorandum of Agreement between SC DHEC and SCE&G (McMeekin Station).

3. Does the current system balance federal, state, and tribal roles to provide timely, accurate permitting for business activities, balancing environment protection and economic growth?

South Carolina has an excellent working relationship with EPA permitting review staff, which has been beneficial to both agencies. We, however, struggle with the implementation of EPA's rules and guidance. Insufficient or delayed information from EPA has delayed permit issuance in many critical cases. The following recommendations could provide for more timely and accurate permitting.

- EPA must provide more appropriate, timely and **written** guidance and responses to questions. Appropriate guidance must be issued with final rules, with stakeholder involvement from the initial stages of development. Guidance must be applied consistently between EPA headquarters and the regional offices.
- The effect of the NAAQS on permitting is immediate. Upon the effective date of a NAAQS, Prevention of Significant Deterioration (PSD) permit applicants need to show that they will not contribute to a violation of that NAAQS. This often requires technical guidance and air quality modeling protocols that EPA has not yet developed, leading to confusion and uncertainty. EPA often resolves problems as they arise, after issuing the NAAQS. This is due in part to institutional issues at EPA. One group develops the NAAQS, and then another group develops implementation tools. Coordination between these groups seems inadequate. Also, many air rules require communication and coordination across EPA program offices, including other media areas, and across the ten EPA regional offices.

The 2010 SO₂ and NO₂ NAAQS appeared to have been finalized with little internal EPA coordination to address air quality modeling requirements, and EPA has not resolved these issues as of this date. EPA compounded this problem by not providing sufficient public notice on key aspects of the proposed SO₂ NAAQS.⁶ If they had, stakeholder comments would have identified problems so they could have been avoided or corrected.

4. Does the Clean Air Act support reasonable and effective mechanisms for federal, state, tribal and local cooperation through State Implementation Plans? How could the mechanisms be improved?

The SIP process required by the Clean Air Act could be improved. Several of many problems with the SIP process are:

- The SIP process focuses on the NAAQS, dealing with one pollutant at a time, mainly in nonattainment areas. In reality, a multitude of pollutants have to be dealt with at one time

⁶ Primary National Ambient Air Quality Standard for Sulfur Dioxide; Final Rule, 75 Fed. Reg. 35520 (June 2, 2010). In this final rule, EPA adopted a "significantly revised approach" that would require states to use modeling "as the principal means of assessing compliance for medium to larger sources."

- and their issues are not present only within nonattainment areas (Clean Air Act Section 109).
- SIP requirements are not clearly stated in the Clean Air Act, which means EPA must develop guidance documents that create the requirements. EPA does not typically release SIP guidance in a timely manner, meaning states do not know the rules on which EPA will judge SIP submissions at the time that states are writing the plans. Moreover, EPA over-relies on guidance documents instead of formal rulemaking. Guidance documents often lack a comment period and have ambiguous legal force.
 - NAAQS attainment dates and the dates for SIP submission are unaligned, requiring states to address each individually instead of being able to consolidate efforts (Clean Air Act Section 172 (a)(2)).

5. Are cross-state air pollution issues coordinated well under the existing framework?

EPA has the resources, such as air quality modeling and policy-making staff, to address air pollution that crosses state lines. In the cooperative federalism relationship we share with EPA, we appreciate EPA's role in addressing these multi-state issues. There is room for improvement, as EPA's record in court on the Clean Air Interstate Rule (CAIR) and Cross State Air Pollution Rule (CSAPR) demonstrates. The Good Neighbor Provision of the Clean Air Act (Section 110(a)(2)(i)(I)), the statutory basis for CAIR and CSAPR, is general and should be clarified.

We also make two points on state implementation of these rules. First, EPA is disapproving SIPs that rely on CAIR to address transport of air pollution.⁷ CAIR was remanded more than three years ago, and EPA has not addressed how states can address air pollution transport in SIPs. States are being negatively impacted because the EPA program on which they relied was ruled unlawful. Sources are complying with CAIR as required by Court order, however, and EPA is not allowing states to capture that in SIPs. Though we appreciate that EPA has been sensitive to the fact that these disapprovals come from no fault on the part of states, EPA could provide a more practical solution than simply disapproving SIPs.

Second, EPA's delay on addressing the implementation of CSAPR has hindered state permitting efforts. EPA promised guidance on permitting following the release of CSAPR, but that guidance never came. With the stay of the rule, EPA's efforts on this stopped, even though they continued to work on other CSAPR-related actions, such as changing the budgets for some states. This second issue is related to a larger theme in our dealings with EPA, and that is the importance of timely communication and response by EPA. When we meet with community groups or permit applicants, for example, we often cannot answer questions about federal policy because EPA has not provided timely answers to state questions.

6. Are there other issues, ideas or concerns relating to the role of federalism under the Clean Air Act that you would like to discuss?

⁷ See, e.g., Approval and Promulgation of Implementation Plans; South Carolina; Regional Haze State Implementation Plan, 77 Fed. Reg. 38509 (June 28, 2012).

- A key federalism issue under the Clean Air Act is that there are regional differences in air quality management needs. A case in point is the issue of ozone in the southeast. Studies have shown that in general, the southeastern US is "NO_x-limited,"⁸ meaning that reducing anthropogenic volatile organic compound (VOC) emissions is less important in addressing ozone than reducing NO_x emissions. Despite this research⁹ and evidence presented by South Carolina, EPA has rejected these provisions in SIPs for the State's only nonattainment area, an area EPA designated based on its contribution to nonattainment in Charlotte, North Carolina.
- More needs to be done to support and allow for innovative, local solutions, like the Early Action Compacts to address the 1997 Ozone NAAQS.¹⁰ With these compacts, we harness grassroots community support via local Clean Air Coalitions to address the NAAQS sooner than statutorily required. While we appreciate EPA's attempt to further this effort through other programs like Ozone Advance, EPA needs to provide more meaningful incentives for stakeholders to participate in voluntary measures given current economic conditions.
- Another concern is the lack of transparency in decision-making and the need to treat states as co-regulators. EPA doesn't involve states during the key parts of the designation process, citing the need for confidential internal deliberations. While we respect EPA's deliberative process, we request more opportunities to meet with EPA during the designation determination process. This will improve the science on which designations are based and enhance implementation, bringing public health and environmental gains sooner. In a similar vein, EPA should use more Advanced Notices of Proposed Rulemaking. By the time that a rule is at the proposal stage, EPA has already made the agenda-setting decisions.

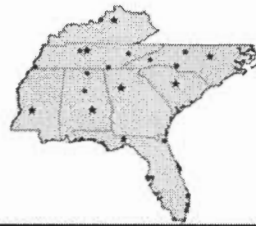
⁸ "NO_x" stands for oxides of nitrogen.

⁹ Duncan, B. et al., 2009, "The Sensitivity Of U.S. Surface Ozone Formation to NO_x and VOCs as Viewed from Space," Presented at the 8th Annual CMAS Conference, Chapel Hill, NC, October 19-21, 2009. Available at http://www.cmascenter.org/conference/2009/abstracts/duncan_sensitivity_us_2009.pdf

¹⁰ December 12, 2004, SC Early Action Compact State Implementation Plan.

Appendix B
Southeastern States Air Resource Managers, Inc.
State Implementation Plan Summit

“Improving the Current Air Quality Management and SIP Processes.”



September 9, 2010

The Honorable Gina McCarthy
Office of Air and Radiation
U. S. Environmental Protection Agency
Ariel Rios Building - Mail Code 6101A
1200 Pennsylvania Avenue NW
Washington, DC 20460

Dear Assistant Administrator McCarthy:

Enclosed please find a document entitled "*Improving the Current Air Quality Management and SIP Processes*." This document represents many months of work and commitment by a team of staff from a coalition of undersigned southeastern state and local air pollution control agencies. Along with the coalition states, other partners participating in this process included representatives of air programs in Michigan, Utah, Wisconsin, the Lake Michigan Air Directors Consortium (LADCO) and EPA Region 4.

At a time when states are facing unprecedented air quality challenges, air pollution control agencies are also struggling to deal with budget and resource shortfalls. States are assessing every activity and contemplating different strategies to cope with these budget reductions, recognizing that process improvements are essential. The participating agencies have identified numerous opportunities to make the state implementation plan (SIP) process more effective and efficient, including more results-oriented. Concerns with the SIP process hindering states' ability to meet air quality goals in the most efficient manner and recognition of the urgency to reform the SIP process are not unique to this coalition of states. There is broad-based support for the various principles and recommendations in the enclosed document as evidenced by the interest generated by numerous other initiatives involving states in EPA's Region 7, the National Association of Clean Air Agencies, the Environmental Council of the States, and other interested groups.

In the weeks and months ahead, our agencies look forward to a continued dialogue with EPA, with states in other regions of the country, and with other stakeholders in an effort to strategize how best to address our concerns and ultimately improve the air quality management process.

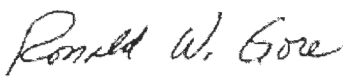




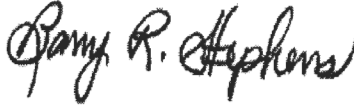
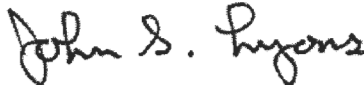



We invite you and key members of your staff to participate in a discussion of our efforts at 8:30 a.m. EDT Tuesday, November 2, 2010 in Louisville, Kentucky. During this discussion, we will explore next steps in the process of implementing the

recommendations contained in the attachment. We will also share perspectives as co-regulators in our collective air quality management efforts.

We also invite all participants to stay into the afternoon of November 2 for the beginning of our local/state/EPA air directors' meeting. During the afternoon session, we will discuss new federal initiatives and related local/state perspectives.

Thank you for your consideration of our suggestions. We look forward to working with you on this and other issues of critical importance to our agencies.

Sincerely,

 Ronald W. Gore Alabama DEM Air Division	 Sheila C. Holman North Carolina DENR Div of Air Quality
 Joseph Kahn Florida DEP Div of Air Resource Mgmt	 Myra C. Reece South Carolina DHEC Bur of Air Quality
 James Capp Georgia EPD, Air Protection Branch	 Barry R. Stephens Tennessee DEC Div of Air Pollution Control
 John S. Lyons II Kentucky DEP Div for Air Quality	 Michael G. Dowd Virginia DEQ Div of Air Quality
 Maya Rao Mississippi DEQ Air Division	 John A. Benedict West Virginia DEP Div of Air Quality

Enclosure

Copies: Janet McCabe, EPA OAR
Carey Fitzmaurice, EPA OAR
Greg Green, EPA OAQPS
Anna Wood, EPA OAQPS
Diana Esher, EPA Region 3 APD
Carol Kemker, EPA Region 4 APTMD

Improving the Current Air Quality Management and SIP Processes

September 9, 2010

Synopsis

In the United States, meeting national air quality standards is a shared responsibility among federal, state, tribal and local entities. Many of the programs are developed and administered by the states pursuant to the federal Clean Air Act (CAA) and its subsequent amendments. Much progress has been made over the past four decades and air quality has significantly improved throughout the nation. Nonetheless, many states have found a number of existing policies and procedures to be overly burdensome; yielding little if any air quality benefit and, in some cases, exacerbating air quality issues.

A significant coalition of states, originating in the southeast, has identified several issues, which have been historically encountered during the development of State Implementation Plans (SIPs) under the CAA. Resolution of these issues would reduce duplication of effort, streamline plan development and submittal, and dramatically increase the efficiency of the air quality management process. The coalition recognizes that many of these issues are not new and that some have been identified by other groups. Nevertheless, we believe that our efforts are complementary and serve to underscore the critical need for rapid action. Although EPA has taken steps to mitigate some issues, serious gaps and significant problems remain. Effective resolution of these problems has become even more important as resource demands increase and available resources stay constant or decrease. Therefore, it is imperative that EPA acknowledge these issues and take definitive action to simplify and streamline the SIP process.

The coalition welcomes and encourages other states and air quality management entities to join in this effort. We believe that our shared knowledge and experiences can lead to streamlined procedures while maintaining and improving air quality.

Background

The air pollution control agencies in the states of Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia and West Virginia regularly collaborate on air quality issues of common interest. During a 2009-2010 review, the current air quality management process, including the State Implementation Plan (SIP) process, was identified as demanding additional evaluation and discussion. Developing a grass roots initiative, led by the state and local agencies that are ultimately responsible for implementing the CAA requirements, became a priority.

Protecting public health and the environment of the 70 million people (nearly one fourth of the U.S. population) that live in these states through timely and effective management of air quality is the number one priority of our air agencies. Associated

with this responsibility are many important and complex obligations. As agencies have faced severe resource challenges, they have evaluated how obligations may be met more cost-effectively.

Since the late 1980s, a number of task forces, work groups and studies have looked at the air quality management system and made recommendations for improvements:

- On January 19, 1989, a work group convened by the U.S. Environmental Protection Agency (EPA) released a report in the *Federal Register* on streamlining the SIP process.
- In January 2004, the National Research Council released a report entitled "Air Quality Management in the United States" in which it finalized its recommendations on needed SIP process improvements.
- In 2005, the Air Quality Management Work Group, established by the Clean Air Act Advisory Committee (CAAAC), released its report "Recommendations to the Clean Air Act Advisory Committee: Phase I and Next Steps."
- In 2007, North American Research Strategy for Tropospheric Ozone (NARSTO) was charged with assessing the technical challenges of transitioning from a pollutant-by-pollutant approach to air quality management to the risk-based, multi-pollutant approach suggested by the National Research Council in 2004.
- In June, 2007, the Air Quality Management Work Group finalized Phase II Recommendations to the CAAAC.
- In January, 2008, the CAAAC released a final report developed by its Vision and Goals Work Group entitled "A Vision and Guiding Principles for the National Air Program."
- In 2010, the National Association of Clean Air Agencies (NACAA), Environmental Council of States (ECOS) and EPA joined together in a cooperative initiative to make the SIP process more efficient and effective.

Through the years, recommendations have been made and substantive dialogue has taken place between EPA and the states, and while the dialogue is continuing, states need EPA to make much more substantial progress on implementing the needed changes.

In September, 2009, a "SIP Summit" was held in Columbia, South Carolina to discuss the successes of the CAA and to begin identifying improvements to the air quality management and SIP processes. Attending this summit were environmental commissioners from Mississippi and South Carolina; air directors and air program representatives from Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia; a local air program director

representing local air agencies in the Southeast; a former environmental commissioner and current member of the CAAAC; representatives from local government, an industry, and an environmental nonprofit; and, representatives from EPA Region 4 (including the acting Regional Administrator and Acting Deputy Regional Administrator) and Office of Air Quality Planning and Standards.

At the SIP Summit, states signed a resolution which demonstrated their commitment to maintaining and improving air quality and to seeking a more efficient, cost-effective, and common sense approach to air quality management in the United States. This resolution is attached as Appendix B.

After further discussion at the November, 2009, EPA Region 4 Air Directors meeting, two work groups were formed. A Technical Work Group, made up of state air program staff who are directly involved in development of SIPs, was charged with identifying and recommending possible solutions. A Policy Work Group, made up of the state air directors and a local air agency director, is responsible for developing the policies and strategies to engage all stakeholders in improving the air quality management and SIP process.

Principles

Subsequent to the September 2009 SIP Summit and in response to those discussions, the following guiding principles were established:

- Air Quality Management should be about:
 - Accountability – All air quality agencies must be held accountable for meeting their statutory and regulatory obligations.
 - Effectiveness – Air quality management must focus on effective measures that result in desired air quality improvements.
 - Efficiency – The SIP process must be as efficient as possible, obligating the fewest resources necessary to accomplish the objective.
 - Flexibility – State and local agencies need a full spectrum of options to tailor control strategies to the air quality situations in their respective areas.
 - Innovation – The air quality management process must be allowed to evolve continually in response to the emergence of promising technologies, new ideas, and improved understanding of the science of air quality.

- Partnership –A strong partnership is essential among all levels of government, business and industry, and environmental groups to solve current and future air quality problems.
 - Predictability – State and local agencies and the regulated community need to know with certainty their obligations and when they must be completed. Competing and overlapping requirements that interfere with cost-effective implementation should be avoided.
 - Transparency – Decisions must be made in an open process, so that all partners and stakeholders will know their roles and obligations, have input, and understand how decisions are reached.
- There have been many efforts through the years that focused on improvements to the air quality management process. This effort will build on those recommendations. Specific short-term and long-term improvements will be identified, including those that will require a CAA change. The participating agencies are committed to work with EPA and others to facilitate implementation of the recommendations and bring about the needed reform. The objective is to provide a desired solution to each opportunity identified. Recommendations will be provided to EPA as they are adopted, so that progress can be made as process improvements are identified.
 - State and local air agencies want to be treated as partners with EPA since we are co-regulators with primary responsibilities for implementing the air program under the CAA. State and local agencies are not just a stakeholder in CAA implementation.
 - Declining resources and increasing responsibilities demand that we address air quality management in a new way. EPA should allow multi-pollutant approaches wherever applicable and appropriate. Technical analysis tools have improved in recent years such that multiple air quality parameters can be evaluated in single model runs. The next step is for EPA to allow states to develop and submit SIPs in a multi-pollutant format if they choose to do so. However, the current reality of multiple SIP schedules and deadlines creates major obstacles preventing state and local agencies from fully implementing this fundamental change in approach. States would like to see as much flexibility as possible. If a pollutant-by-pollutant SIP submittal approach fits the resources better in a given state, that state could follow the more traditional approach at its option.
 - Funding from EPA should be commensurate with the resource demands of new and pending federal standards and requirements.

In January, 2010, the technical work group began holding conference calls to develop the list of items that EPA could take action on quickly and then those that would require a longer term fix, possibly including amendments to the CAA. Along with the coalition

states, others participating in the discussions included representatives of air programs in Michigan, Utah, Wisconsin, the Lake Michigan Air Directors Consortium (LADCO) and EPA Region 4. The Technical Work Group completed its assignment in July, 2010.

In late July, 2010, the coalition states met to review the information developed by the Technical Work Group and to discuss policies and strategies to broaden stakeholder involvement in this effort. The following actions were discussed and are now submitted to EPA for action and response. These actions are not submitted in priority order as they are all critical to improve the air quality management and SIP processes and bring about needed public health and environmental protection in a more efficient and effective way.

Immediate Term Actions

This document should be considered as a snapshot of current issues, a work in progress which serves as a springboard for continuous improvement. The coalition states request that EPA act now to address the following:

I. Air Quality Management

- a. Implementation of already identified improvements should be accelerated. Further improve the air quality management process by involving state and local air agencies in developing a comprehensive approach to air quality management that provides an opportunity for multi-pollutant planning. While implementation can begin immediately and build upon recent and ongoing air quality management plan pilot projects, there is a long-term component to this issue that may require CAA amendments to align SIP submittal and National Ambient Air Quality Standard (NAAQS) attainment dates to fully allow for an integrated air quality planning process.
- b. Ensure decisions for air quality management are based on current science. Develop and/or expand research related to air quality exposure and public health and welfare impacts. Prioritize regulatory actions in terms of the effect on improving human health and welfare. Add a measurement component to assess progress and improvements to public health and welfare resulting from lower air pollution concentrations. To validate public health and welfare benefit estimates used when NAAQS and other requirements are set, compare results to estimates used when final standards and/or requirements are set.
- c. With input from individual state and local air agencies, define and develop specific natural and transported background levels of pollution for all regions of the country.

II. States/Locals as Co-regulators

- a. Create a formal process to involve individual state and local air agencies early in the process for EPA policy, rule and guidance development. State and local air agencies must be considered co-regulators, not just general stakeholders.

III. Schedules

- a. Implement federal measures consistent with attainment deadlines established by NAAQS so these critical air quality improvements can help areas with attaining standards and meeting deadlines, resulting in earlier public health and welfare benefits.
- b. Consider the state administrative procedure processes when setting schedules. Some state processes are lengthy and require more public participation than a 30-day public notice – sometimes including legislative review or approval of state rules.
- c. Consider the data requirements for EPA-approved regional air quality models and base year SIP development when updating the air emissions inventory reporting rule.

IV. Timely and Practical Guidance

- a. When proposing a new NAAQS, simultaneously propose all implementation requirements and guidance, new monitoring requirements, technical tools, appropriate model rules, and any other associated and necessary components of the program.
- b. Finalize all components concurrently so that states understand the full scope of what will be required and can also begin early implementation.
- c. Work with states/locals to estimate the resources needed to implement any new requirements and identify a mechanism to provide these resources. EPA expectations should not exceed available resources.

V. Boundaries

- a. Establish a basis for determining the size of non-attainment boundaries and the need for larger or smaller boundaries that is founded in an analysis of air quality needs and impacts. Incorporate a factor into the guidance that allows flexibility to boundary size where state and/or local air agencies have authority to implement requirements needed on sources anywhere in their state to meet the NAAQS. While some states may prefer larger boundaries because they only have authority to implement

requirements within a specified boundary, many states/locals have the authority to set requirements anywhere controls are deemed necessary within their state boundaries. These states/locals should not be unfairly penalized for consistency's sake alone or for the primary purpose of addressing factors beyond the scope of air quality needs. The motive for requiring larger boundaries is sometimes based on a stated desire to ensure that the public is aware of air quality. Providing real time air quality data and a daily forecast is the best way for the public to be informed about local air quality so they can take action to protect themselves on days when air pollution levels are predicted to be of concern. Delayed reports using an air quality index and designations several years later may be part of the SIP process but they are not the best way for communities to learn about their air quality or to take action to protect their health.

- b. Modify the factors for determining appropriate nonattainment boundaries in collaboration with affected states. EPA has established processes to address areas that do not meet air quality standards. Geopolitical boundaries were not designed for air quality planning purposes. The CAA only specifies boundaries for nonattainment areas rated in the serious or higher category; in those cases based on Metropolitan Statistical Area (MSA) or Consolidated MSA (CMSA) information. EPA is not required to use Core Based Statistical Area data as EPA currently presumes for all areas. For areas where EPA is not required to use mandatory criteria, EPA should work closely with affected states to evaluate contributions to the nonattainment problem. EPA should consider other factors provided by the states and establish boundaries that address significant contributions from those states while avoiding expansion of the boundaries into areas that are not contributing emissions of significance.
- c. Working closely with the states to define boundaries will also help EPA avoid establishment of ineffective measures that will not be of substantive value in such areas. The understanding of the science of air chemistry has continued to evolve over the past two decades. For instance, in some regions of the country, biogenic volatile organic compounds (VOCs) dominate the VOC source category. (See attached North Carolina VOC Insensitivity document). We now know that certain federally-mandated control requirements have not been effective and are not necessary because they do not bring about needed air quality improvements/benefits to reduce ozone concentrations. Examples of mandates that require significant resource investments but do not bring about needed improvements in ozone concentrations due to atmospheric chemistry include :
 - Stage II gasoline vapor recovery systems at fueling stations;
 - Vehicle inspection and maintenance programs;
 - Mandates for 15% reduction in VOCs; and

- Requirements for reasonable achievable control technology (RACT) for VOC emissions.

If states and EPA can work together to arrive at conclusions as to the primary sources of pollutants contributing to nonattainment and interference with maintenance, SIPs can be better targeted towards the emission sources and associated pollutants that are most significantly contributing to the air quality problems that need our attention.

- d. Provide clear guidance on the use of the factors to be employed in determining nonattainment boundaries. Share all technical information well before formal discussions on boundaries begin to provide for effective dialogue during the 120-day consultation period.
- e. Develop nonattainment designations to fairly address areas that are impacted by transport, in particular for rural areas, so that the impacted areas are not unduly penalized.

VI. SIP Process

- a. Document the minimum national requirements for approval of SIPs in checklist or similar form and provide this information as part of the guidance for implementing specific national regulations. Develop and share with the states boilerplate language to use in addressing problematic provisions. Explore the use of a flow chart and other tools to facilitate SIP submittals and approvals.
- b. Develop a searchable online database for tracking the status of SIPs. This should include one-stop access to submittal information, documentation of the nature and dates of EPA requests for additional information, and the dates of SIP approvals. This information should be maintained on the internet and updated promptly to ensure transparency.
- c. Given the consistent nature of infrastructure SIPs, simplify requirements to allow a certification with updated/changed information when a new/revised standard is promulgated rather than requiring a full SIP submittal. Identify basic elements that have been in place since the first SIP for a state was approved and do not require repeated submittals of identical information. This should include, but not be limited to, items such as program authority, adequate resources, emergency power, future SIP revisions, consultation with government officials, public notice, permitting fees, and consultation/participation by affected local entities.
- d. To facilitate the SIP submittal and approval process, in addition to not requiring the repeated submittal of information for infrastructure SIPs, do not require repeated submittal of other SIP documentation that has been

provided in previous submittals, such as program authority, technical information that was provided in the initial submittal, etc.

- e. Implement a consistent approach for the overarching framework of SIPs but provide EPA regions the authority, flexibility, tools and training needed to evaluate the more detailed components of each SIP submittal based on its own merits. It would be helpful for EPA comments to distinguish between the requirements of the CAA versus recommendations or suggestions for the states to consider.
- f. Allow states to determine the most appropriate mechanisms for seeking comment from the public about SIP amendments and accept electronic submittals rather than requiring multiple paper copies. While much of this can be addressed now, there are certain elements that may require regulation revisions for full implementation.
- g. For multi-state regional efforts, allow submittal of one copy of technical documentation for the region, if available, rather than requiring each state to develop and submit duplicative state-specific documents.
- h. Streamline and simplify the reporting requirements under the Emerging and Voluntary Measures in a SIP Guidance to focus on results. Develop tools to aid in estimation of potential emission reductions and resultant reduction credits allowable to meet SIP obligations.
- i. When attainment guidance is developed, incorporate only such SIP requirements as are truly necessary and effective to adequately manage air quality and track progress.
- j. Continue to recognize and embrace weight-of-evidence demonstrations for planning and implementation.
- k. Use letter approvals and/or certifications for approving minor SIP revisions rather than the more formal and complex processes.

VII. EPA Internal Communication and Coordination

- a. Create a staffing complement with more experience in state issues. This would help EPA better understand state perspectives and the importance of certain state policies and directions. EPA could benefit from a greater knowledge of state concerns as it reviews SIP submittals and provides guidance to the states. In addition, develop adequate training and other tools to establish and sustain a knowledgeable, skilled EPA staff that can provide state and local air agencies guidance necessary to submit approvable SIPs and answer technical inquiries in an expeditious manner. Utilize the Interagency Personnel Agreement (IPA) where appropriate for

key positions in order for EPA staff to work in states and gain on-the-ground knowledge and experience at the state level. Specific examples where more prompt response to requests for guidance is needed include nonattainment and regional haze guidance, maximum achievable control technology (MACT) major facility alternative monitoring requests, and MACT and New Source Performance Standard (NSPS) applicability determinations.

- b. Ensure communication and coordination occurs within all areas of EPA; e.g., offices within regions, offices within headquarters, and between regions and headquarters. It is important for EPA to review and provide timely comments on state/local submittals so there are no advisories of the need for more comments and/or additional requirements. Many states/locals have lengthy processes for rule development which requires involvement by their General Assembly and/or local commissions or councils. Having a consolidated list of all EPA comments available at the right time in the process will help ensure that state/local air agencies only have to go through the process a single time. We recognize that states must provide timely draft SIP components for EPA review in order to contribute to a more streamlined process. In addition, EPA should also ensure that all issues/concerns related to transportation conformity are brought forward in a timely manner during the interagency consultation process.
- c. Ensure communication and coordination occurs within and between EPA's regional air pollution control divisions and with other EPA media programs during development of rules and policy since many decisions in one initiative directly impact another. For example, coordination is needed between NAAQS and MACT programs to ensure that requirements in one area do not negatively impact or contradict requirements in another and between CAA and Resource Conservation and Recovery Act (RCRA) programs when developing regulations that can impact state activities; e.g., the commercial and industrial solid waste incineration (CISWI) rule.
- d. As many of the SIP process issues/concerns also apply to the Section 111(d)/129 plan process, ensure that efficiencies developed and provided for the SIP process are incorporated into the Section 111(d)/129 plan process.
- e. For documentation for SIP submittals and other activities such as grant work plan reports, EPA should not require a state or local air agency to submit additional information or make revisions to existing documentation just because another agency has submitted additional information.

VIII. Monitoring

- a. Utilize existing research and development programs at EPA or request states/locals to conduct special studies when additional monitoring data is needed.
- b. Work with state/local air agencies to develop a process to allow special monitoring projects where needed to understand potential concerns without the threat of a nonattainment designation. The process should include development of a case-by-case plan for an area which allows for public participation throughout the process.
- c. Evaluate current data completeness and data substitution policies to ensure that they are not unnecessarily punitive, especially when it is clear that the area is meeting the standard except for influence of the data substitution requirements.

IX. Mobile Sources

- a. Develop national measures on mobile source fuels and all on-road and off-road mobile sources to address NAAQS and air toxics concerns including acrolein, benzene, and formaldehyde.

X. Funding

- a. Provide new funding to state/local air agencies to meet new NAAQS and/or identify programs that can be eliminated or reduced in scope. Work with state/local air agencies to estimate the resources needed to implement any new requirements and identify a mechanism to provide these resources. It is critical that the expectations not exceed the available resources.
- b. Continue to award funding for PM_{2.5} and any new monitoring efforts under the provisions of Section 103 of the CAA.
- c. Completely fund the public notification cost for SIP process advertisements in newspapers when mandated by EPA policy.
- d. Streamline the funding process for regional planning. Allow consolidation of air quality analysis efforts on criteria pollutants and regional haze regardless of the entity conducting the work; i.e., whether a multi-jurisdictional organization (MJO) or a regional planning organization (RPO). Work on criteria pollutants and regional haze should be completed jointly since much of the fundamental technical work such as monitoring and other collection of data, development of emission inventories, and modeling, is now integrated into a single planning and analysis approach.

- e. Identify a base amount of ongoing national funding that is not derived from State and Tribal Assistance Grant (STAG) funds to provide to MJOs/RPOs to assist with conducting integrated technical work for criteria pollutants and regional haze. This regional process is invaluable to states/locals as it utilizes valuable resources in the most efficient manner and limits duplication of effort.

XI. Public Notice of Permits

- a. Revise regulations to more explicitly allow public notice of permits by mechanisms other than only in the legal notice section of newspapers. The current requirement is antiquated and unnecessarily resource intensive. There are more effective ways for these notices to be communicated to the public today and this would result in significant cost savings, for some states up to \$70,000 a year.

XII. Transparency with the use of data

- a. Leverage the knowledge and experience in state and local air agencies to develop the processes and methodologies that will provide data and information to the public in a useful and understandable manner. Evaluate the processes for using data for policy decisions and rulemaking to ensure that the data is the best, most accurate data possible and that its use is appropriate for the intended purpose. Issues with legacy systems should be addressed. Examples where this has been problematic include, but are not limited to such EPA programs as the Toxic Release Inventory (TRI), National Air Toxics Assessment (NATA), Assessment of Outdoor Air Near Schools, Air Information Retrieval System (AIRS) Facility Subsystem (AFS), and the Enforcement and Compliance History Online (ECHO).

Longer Term Actions

- I. The participating agencies in this SIP reform effort recognize that the following additional actions may require amendments to the CAA and commits to continue efforts to work with all stakeholders to amend or find innovative ways to work within the constraints of the CAA to allow for an improved and updated approach to managing air quality.
- II. Transition to an integrated air quality management approach to protect public health and the environment that maximizes air quality improvement and minimizes the unintended consequences and resource burden of pollutant-by-pollutant air quality management.
- III. Align schedules for new/revised NAAQS to allow for efficient and effective air quality management.

- IV. Avoid penalizing the states for actions beyond their control when federal rules/guidance and measures that are substantially needed to meet NAAQS and other requirements are not finalized on time or are subjected to litigation.
- V. Recognize the differences in ozone chemistry throughout the U.S. and address the issues related to Subpart II and the prescriptive requirements for control of VOCs where such measures do not lower ozone concentrations.
- VI. Address CAA requirements that require state and local air programs to take action when EPA fails to act; e.g., Section 112j.
- VII. Address federal grant funding match requirements to ensure they are appropriate and reasonable for efficient and effective air quality management.

The coalition welcomes and encourages other states and air quality management entities to join in this effort. We believe that our shared knowledge and experiences can lead to streamlined procedures while maintaining and improving air quality. The coalition states appreciate EPA's prompt response to these action items and looks forward to discussing this information with EPA. We also look forward to EPA's implementation of the items that can be acted upon now and in working with EPA on future efforts to address the remaining concerns. Our goal is to protect public health and the environment through timely and effective air quality management and we need EPA's assistance to make that happen.

Appendix A

Works Cited

- Air Quality Management Subcommittee. "Air Quality Management Subcommittee Phase II Recommendations." *U.S. Environmental Protection Agency*. 2007. Web. 06 Aug. 2010. <<http://www.epa.gov/air/caaac/aqm.html>>.
- Clean Air Act Advisory Committee. "A Vision and Guiding Principles for the National Air Program." *U.S. Environmental Protection Agency*. 2009. Web. 06 Aug. 2010. <<http://www.epa.gov/air/caaac/vision.html>>.
- Committee on Air Quality Management in the United States, National Research Council. "Air Quality Management in the United States." *The National Academies Press*. 2004. Web. 06 Aug. 2010. <<http://www.nap.edu/openbook.php?isbn=0309089328>>.
- NARSTO. "Multi-Pollutant Accountability." *NARSTO - Better Air Quality for North America*. Web. 06 Aug. 2010. <<http://www.narsto.org/mpacc.src>>.
- Recommendations to the Clean Air Act Advisory Committee. "Recommendations to the Clean Air Act Advisory Committee: Phase I and Next Steps." *U.S. Environmental Protection Agency*. Jan. 2005. Web. 06 Aug. 2010. <<http://www.epa.gov/air/caaac/aqm.html>>.
- "Region 7 SIP Kaizen Event." *Environmental Council of the States*. 2010. Web. 06 Aug. 2010. <<http://www.ecos.org/section/committees/air>>.
- The Title V Task Force. "Final Report to the Clean Air Act Advisory Committee on the Title V Implementation Experience." *U.S. Environmental Protection Agency*. Apr. 2006. Web. 06 Aug. 2010. <<http://www.epa.gov/air/oaqps/permits/taskforce.html>>.

Appendix B

Resolution Supporting Revisions To Air Quality Management Approaches Under The Federal Clean Air Act

**RESOLUTION SUPPORTING REVISIONS TO AIR QUALITY MANAGEMENT APPROACHES
UNDER THE FEDERAL CLEAN AIR ACT**

WHEREAS, ambient air is a shared resource requiring multi-jurisdictional planning and collaboration for its proper management; and

WHEREAS, the signatory agencies to this Resolution are firmly committed to maintaining and improving air quality, a necessary component of the agencies' mandate to protect public health and the environment; and

WHEREAS, environmental protection agencies share the responsibility of reducing air pollution sufficiently to ensure attainment with national ambient air quality standards (NAAQS) and compliance with hazardous air pollutant emission standards promulgated by the United States Environmental Protection Agency (EPA); and

WHEREAS, States are individually charged with carrying out requirements of the Clean Air Act including development of State Implementation Plans (SIPs) that outline how air pollution will be controlled to meet EPA regulations; and

WHEREAS, substantial progress has been made by EPA and the States in improving air quality through implementation of the Clean Air Act, as amended, and related state statutes; and

WHEREAS, federal statutory, regulatory, and procedural mandates hinder progress toward a fully effective air quality management system through imposition of unnecessarily burdensome, complicated, and costly requirements; and

WHEREAS, while states have authority to regulate industrial sources and limited authority to regulate mobile sources, national standards are traditionally imposed on many sectors by EPA, yet the Clean Air Act requires development of State SIPs incorporating federal emission control requirements for such sectors; and

WHEREAS, authority and responsibility for achieving the NAAQS are not aligned. States are responsible for achieving the NAAQS under the current SIP process, yet the authority to achieve the NAAQS now rests primarily with the federal government (i.e. the ability to regulate federally preempted mobile sources and interstate/international pollutant transport); and

WHEREAS, this failed alignment between authority and responsibility is leading to inefficiencies, delays, and the development of less cost-effective state and local control strategies; and

WHEREAS, the current SIP process cannot efficiently and effectively address the growing relevance of interstate pollutant transport, federally preempted mobile sources, and multi-pollutant considerations; and

WHEREAS, there is a need to transition into a comprehensive multi-pollutant air quality planning process that aligns responsibility for achieving the NAAQS with the authority to achieve the NAAQS and ensures that control strategies are coordinated, prioritized and pursued in the most efficient way possible considering various air quality and climate change goals; and

WHEREAS, SIPs narrowly focus state and local governments on addressing one pollutant at a time, sometimes to the detriment or avoidance of other pollutant concerns; and

WHEREAS, holistic, comprehensive planning is needed that coordinates and prioritizes air quality improvement efforts; and

WHEREAS, the national climate change debate and likely future legislation present unique opportunities to reengineer the air quality management process; and

WHEREAS, the National Research Council, operating under the auspices of the National Academies, evaluated current requirements and future air quality management needs in the United States and provided recommendations supporting regional planning and multi-pollutant strategies to EPA via the Clean Air Act Advisory Committee; and

WHEREAS, federal funding of agencies has been reduced and is critically inadequate; and

WHEREAS, wise stewardship of limited public funds and agency resources require development of more effective, timely, and efficient air quality management approaches to meet future obligations; and

WHEREAS, changes to the Clean Air Act may be necessary to make significant improvements to the air quality management process.

NOW, THEREFORE, BE IT RESOLVED that the undersigned states, through their respective environmental agencies and in the interest of a more efficient, cost-effective, and common sense approach to air quality management in the United States, hereby agree:

1. To work collaboratively to improve the efficiency and effectiveness of air quality management in the Southeast; and
2. To work collaboratively and, where appropriate, conduct consolidated regional planning that, to the extent practicable, is based on a multi-pollutant approach; and
3. To promote the implementation of flexible, cost-effective solutions to air quality problems; and
4. To continue our proactive work with various stakeholders including the regulated community, environmental groups, and governmental agencies to accomplish through regulatory and voluntary efforts desired improvements to ambient air quality as well as the air quality management process; and
5. To encourage EPA to seek short-term and long-term solutions to streamline the SIP process; and
6. To maintain dialogue and work cooperatively with EPA to monitor progress and share ideas; and
7. To provide recommendations to Congress, as necessary and appropriate, to address critically needed air quality management improvements.

Approved and adopted by the undersigned on September 11, 2009:


Alabama DEM - Air Division


Florida DEP - Div of Air Resource Mgmt


Georgia EPD - Air Protection Branch

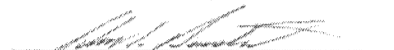

Kentucky DEP - Division for Air Quality


Mississippi DEQ - Air Division


North Carolina DENR - Div of Air Quality


South Carolina DHEC - Bur of Air Quality


Tennessee DEC - Air Pollution Control Div


West Virginia DEP - Div of Air Quality

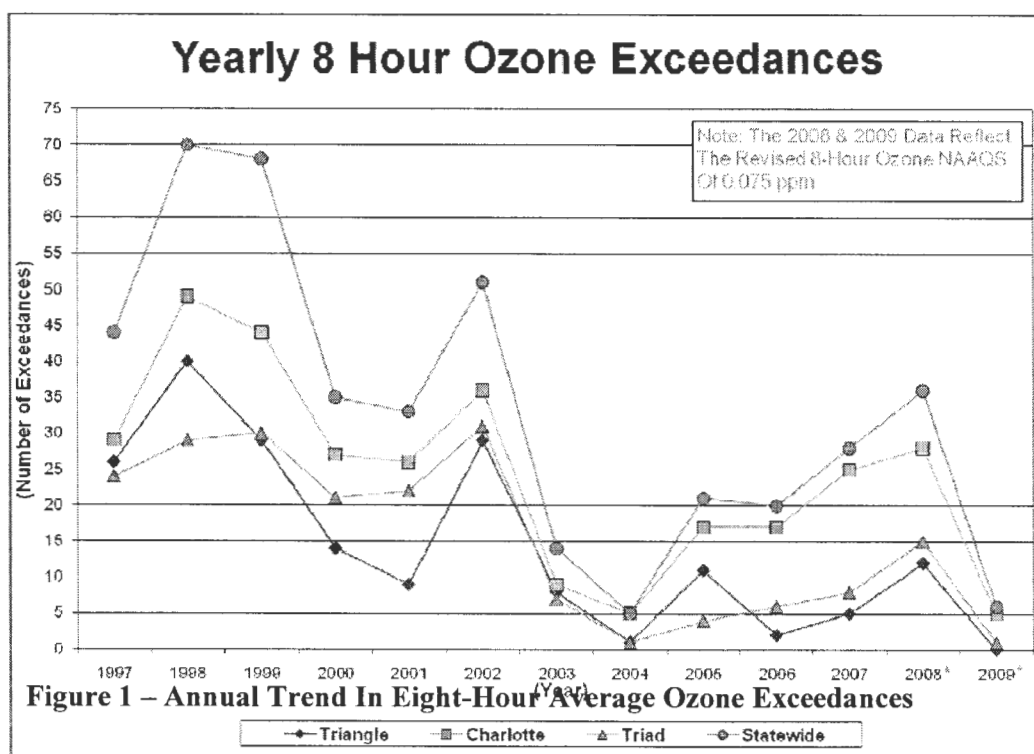
Appendix C

VOC Insensitivity to Ozone Production In North Carolina

VOC Insensitivity To Ozone Production In North Carolina

Introduction

North Carolina has made significant strides over the past two decades in reducing the ambient levels of ground-level ozone in response to ever strengthening National Ambient Air Quality Standards (NAAQS). North Carolina was able to fully demonstrate attainment and continued maintenance of the previous one-hour average ozone standard resulting in that standard's revocation in 2005. North Carolina has also been very successful in demonstrating attainment of the 1997 eight-hour average ozone standard at all but one of the ozone monitoring sites in the state. Even with the recent 2008 eight-hour average ozone standard, the majority of North Carolina is currently attaining this standard with exceptions only in the three largest metropolitan regions. Figure 1 demonstrates the trend in eight-hour average ozone exceedances since 1997 statewide and at the aforementioned three largest metropolitan regions.



Nitrogen Oxide (NO_x) emissions reductions have been the primary strategy for accomplishing the significant reductions in ozone concentrations in North Carolina over the span discussed above. A study conducted by Sonoma Technology, Inc. for North Carolina in 1998 determined that there was no clear signal of Volatile Organic Compound (VOC) limitation anywhere in the state. So, reductions in manmade VOCs would not lead to any significant reductions in afternoon ozone concentrations. Rather, it was determined that the majority of North Carolina was transitionally NO_x limited and that reductions in NO_x emissions would have the greatest benefit on improving ozone concentrations. This report found that only during the early morning hours would decreases in NO_x emissions have an ozone concentration disbenefit due to the reduction in NO_x titration of ozone. However, ozone concentrations are typically at their lowest levels

during the early morning and this potential disbenefit would not have any impact on North Carolina's ability to demonstrate attainment of the ozone NAAQS.

A more recent study performed by Duncan *et al.* in 2009 investigated satellite based NO_x, VOC, and ozone measurements across the entire United States. This study, titled "The Sensitivity Of U.S. Surface Ozone Formation To NO_x And VOCs As Viewed From Space," found that the majority of the Southeastern United States was vastly NO_x limited. In North Carolina, the entire state was shown to be NO_x limited for ozone production with the rural areas extremely NO_x limited. This study further confirms the previous Sonoma Technology, Inc. report and North Carolina's continuing ozone reduction strategy of NO_x emission reductions.

VOC Sensitivities

In the mid-2000's a series of summertime and wintertime VOC sensitivity evaluations were performed through the Visibility Improvement State and Tribal Association of the Southeast (VISTAS) and the Association for Southeastern Integrated Planning (ASIP) regional modeling initiatives. These VOC sensitivities along with numerous other chemical species sensitivities helped the VISTAS and ASIP organizations to make appropriate recommendations for regional haze, fine particulate matter, and ozone concentration improvements throughout the Southeast. In these VOC sensitivities, model simulations were performed to understand the ozone response to natural and manmade VOC emissions. Biogenic and anthropogenic VOC emissions were reduced by thirty percent, respectively. Figure 2 displays the VOC emissions for the Region 4 states and North Carolina. A thirty percent reduction in the biogenic emissions would result in approximately 23,100 tons/day and 2,700 tons/day reductions in VOC emissions for the Region 4 states and North Carolina, respectively. This reduction is greater than twice the total anthropogenic emissions.

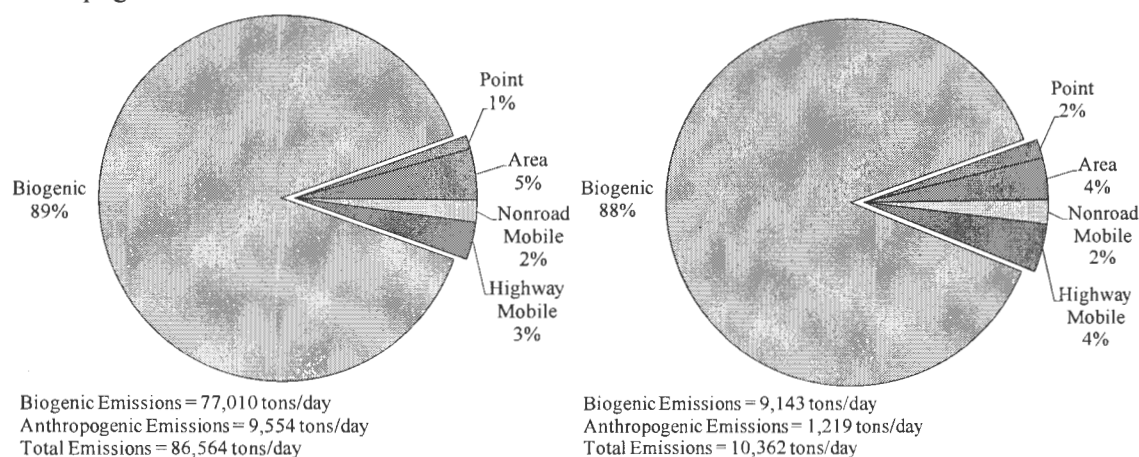


Figure 2 – 2009 Summertime VOC emissions (tons/day) for EPA Region 4 States (left) and North Carolina (right).

In the Southeast, neither the thirty percent reduction in biogenic VOC emissions nor the thirty percent reduction in the anthropogenic VOC emissions resulted in any significant reductions in ozone concentrations. The biogenic VOC emission reductions demonstrated the most change in

ozone concentrations, but the changes in ozone concentrations were still only in the range of 1 to 2 parts per billion (ppb). This can be attributed to the overwhelming contribution of biogenic VOC emissions to the total amount of VOC emission in the atmosphere. A sampling of these VOC sensitivities is provided in Figures 3 and 4. Of note, the highest ozone concentrations in North Carolina during the summertime VOC sensitivity occurred on June 11th.

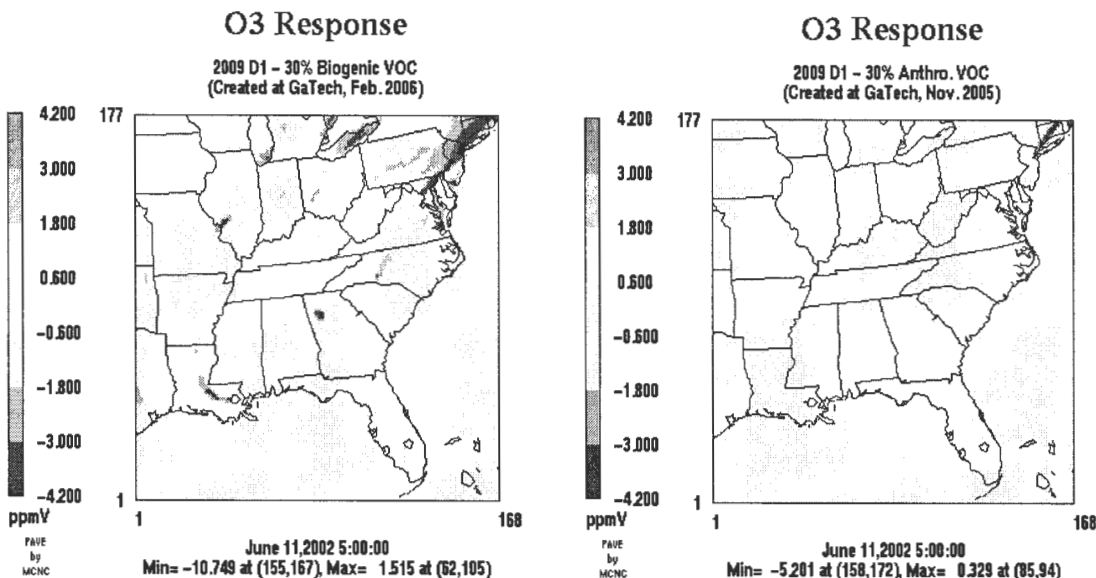


Figure 3 – Ozone response from a 30% reduction in Biogenic VOC (left) and Anthropogenic VOC (right) for June 11, 2002.

(Cool colors represent ozone benefits and warm colors represent ozone disbenefits.)

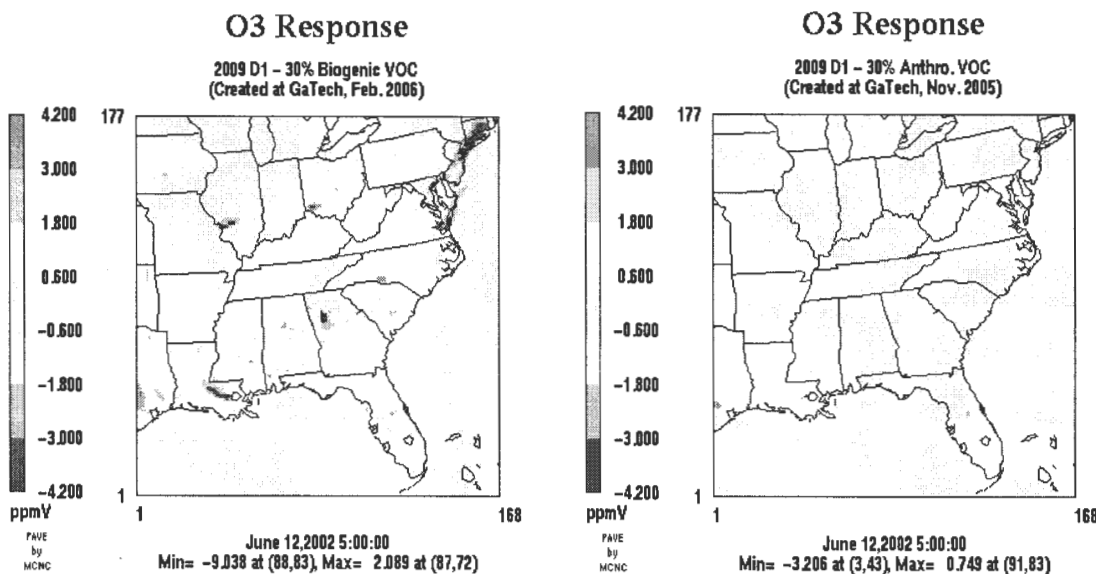


Figure 4 – Ozone response from a 30% reduction in Biogenic VOC (left) and Anthropogenic VOC (right) for June 12, 2002.

(Cool colors represent ozone benefits and warm colors represent ozone disbenefits.)

A closer evaluation of the VOC sensitivity modeling data in North Carolina during both the summertime and wintertime simulations further demonstrates the relatively insignificant change in ozone concentrations due to a thirty percent reduction in biogenic and anthropogenic VOC emissions. Table 1 clearly shows that the anthropogenic VOC emission reductions do not reduce ozone concentrations during the summertime and actually may cause a slight disbenefit or increase in ozone. Reducing anthropogenic VOC emissions during the wintertime does cause some improvement of ozone concentrations, but the change is less than 0.5ppb and would occur at a time that North Carolina is not experiencing any ozone conditions that threaten the NAAQS.

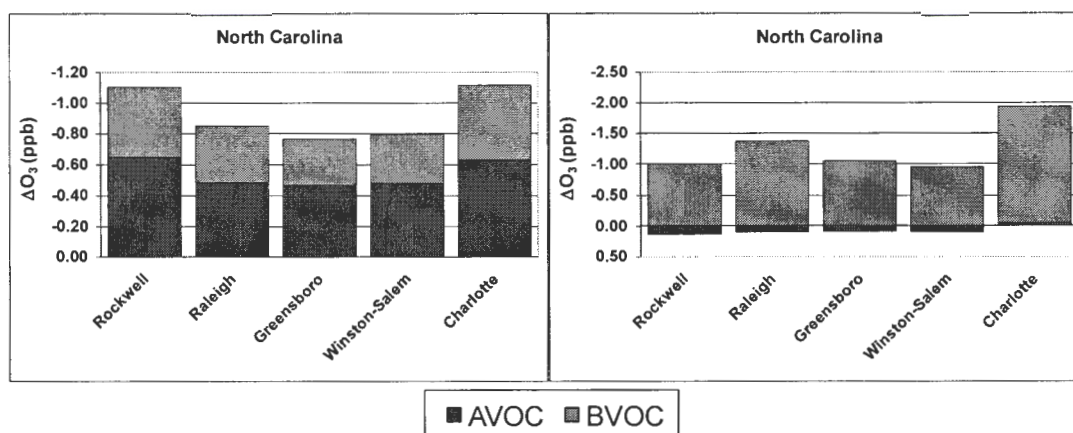


Table 1 – Winter (left) and Summer (right) 30% VOC emission reduction contributions to O_3 change (in ppb) at various O_3 non-attainment areas.

Conclusions

The result of ongoing ambient monitoring and satellite measurements of NO_x, VOC, ozone, and other chemical species continue to indicate that the atmosphere over North Carolina is NO_x limited with respect to afternoon ozone formation. This would indicate that NO_x emissions reductions are the best strategy for reducing ozone concentrations. VOC sensitivity modeling also demonstrates that significant reductions in biogenic or anthropogenic VOC emission do not amount to any significant improvement to ozone concentrations. There are even indications that anthropogenic VOC emission reductions could have a slightly disbenefit in ozone concentrations during the summertime. Additionally, two decades of NO_x emission reduction strategies in North Carolina have yielded significant ozone concentrations reductions, near statewide attainment of the ozone NAAQS, and validation that NO_x emissions reduction rather than VOC emission reductions are the continued best policy in the state.

Appendix C
National Association of Clean Air Agencies
The Environmental Council of the States
U.S. Environmental Protection Agency
(NACAA-ECOS-EPA)
State Implementation Plan Reform Workgroup

Dear NACAA and ECOS Members,

This message and its attachments are in preparation for, and for use during, the special EPA/NACAA/ECOS conference call planned for Monday, August 6, from 12:30 to 2:00 PM EDT. On this call, we will solicit input on these documents and the collaborative process that they describe. Input can be given during the call, or through ECOS and NACAA staff by August 10, 2012.

The EPA/NACAA/ECOS SIP Reform Work Group is co-chaired by EPA (Carey Fitzmaurice), NACAA (Nancy Kruger), and ECOS (Jim Blizzard) and has state/local members from NY, MD, SC, KY, WI, OH, Cedar Rapids, NV, UT, and Sacramento. Under its Life Cycle Analysis Project (LCAP), the Work Group will focus on the totality of the NAAQS implementation process for the proposed 2012 PM NAAQS, including both the revised annual PM2.5 standard and the secondary PM standard based on a visibility index. EPA has brought additional staff from the Office of Air Quality Standards and Planning and EPA Regions 2 and 7 to the Work Group for this purpose, and will engage other EPA offices as needed for the project. The purpose of LCAP is to identify and complete helpful EPA guidance documents that promote consistent, efficient, and timely SIP submittals and to promote efficient and consistent SIP review actions by EPA. Lessons learned from this effort will be used to inform future NAAQS implementation efforts.

The purpose of this note is to provide you with our progress to date for your review and input. Collectively, we have developed several documents that identify the key engagement opportunities during implementation of the 2012 PM2.5 NAAQS and a process to operationalize the opportunities. What follows explains the materials we are providing for your review and how we anticipate using them.

1. What is the Big List? We are informally using the term “Big List” to refer to Attachment 1, *PM 2.5 Key Engagements Opportunities and Deliverables Needed for Successful Implementation of PM NAAQS*. This is a draft list of issues in the NAAQS implementation process, as identified by the SIP Reform Work Group, that need some level of interaction between the states and EPA to develop or improve products (such as an EPA rule or guidance document) or processes (such as resolution of consistency issues during EPA review of SIPs).
2. How was the Big List developed? The SIP Reform Work Group listed all the key actions and products that are needed in each stage of the NAAQS development and implementation lifecycle. This list was expanded to include critical products and engagements between state and EPA regulatory partners. These were then categorized as either “already exists and working well”, “already exists but could be improved”, “does not exist but is needed”, or “does not exist and is not needed”. Those categorized as “already exists but could be improved” or “does not exist but is needed” were consolidated into the attached Big List.

3. Why does the Big List include potential solutions and timing? The actions identified in the Big List as potential solutions are not intended to presuppose the solutions, but rather to prime thinking on a direction for addressing the need for the identified products or engagements. Timing is a critical component for successful implementation.
4. What is anticipated next? The presentation entitled *LCAP Process Moving Forward* (Attachment 2) includes a conceptual model for moving from the Big List to implementable work plans. When an issue/need item is identified as a priority for moving forward, a champion or champions would prepare a Process Planning Paper (see Attachment 3 for an example) as a resource for an in-depth discussion by an appropriate, topic-specific EPA/state group, and would convene that group. The latter group's output would be a detailed work plan (see Attachment 4 for an example). There may be multiple in-depth discussion groups in operation on different topics at one time, and/or discussion groups may address multiple topics in sequence. Some issues/needs may not have to advance to this planning process for some time, based on the timeline for developing and reviewing SIPs.
5. Then what? The responsible author/creator identified in the work plan will get to work. For example, this would be an EPA workgroup in the case of an EPA rule or guidance document. The work plan will identify planned interactions between EPA and states prior to finalization of the product.

If you have clarifying questions on these materials prior to the August 6 phone call, please do not hesitate to contact Tom Coda of EPA's Air Quality Policy Division at 919-541-3037 or coda.tom@epa.gov, Nancy Kruger at NACAA, or Jim Blizzard at ECOS.

Attachments

1. Key Engagements Opportunities and Deliverables Needed for Successful Implementation of the 2012 PM 2.5 PM NAAQS (A.K.A. Big List)
2. LCAP Process Going Forward (Power Point file)
3. Life-Cycle Analysis Project Straw Process Planning Paper on
4. Life-Cycle Analysis Project Straw Work Plan for Development of the PM SIP Requirements Rule

Key Engagements Opportunities and Deliverables

Needed for Successful Implementation of the 2012 PM NAAQS (A.K.A. Big List)

LCAP Sub-team – July 18, 2012

1) NAAQS Setting Stage

a) Issue: Lack of closure regarding the many components of a NAAQS standard until the NPRM or even the final rule prevents well informed early state awareness of what monitors will be violating, planning for needed resources, and outreach to key stakeholders. This puts significant time pressure on the designation recommendation process once the NAAQS is final and precludes early state input to EPA on potential implementation issues and state efforts to assemble necessary NAAQS implementation resources such as for changes to the monitoring network and for new modeling. Additionally, the breadth of optional levels in recently proposed NAAQS (such as ozone) diminishes commitments to early planning and effective outreach for co-regulators. A similar problem would arise with major proposed changes to standard forms including averaging times and any PM sizing variations.

- Success: States are well informed and have a common, broad mutual understanding of the issue which allows a collective assessment of program and then technical needs and related staffing support. States have a clear sense of the potential sources and controls they may face, the form and possible range for the level of the revised NAAQS, an

understanding of the critical precursors that may need to be addressed and the most likely nonattainment areas.

- Potential Solutions: EPA to provide briefing to states on the possible range and forms of the revised NAAQS in order to facilitate a dialogue to obtain their input as co-regulator on the possible implementation planning concerns arising from the potential form changes (averaging period, level, indicator) to NAAQS following the 2nd draft of the Policy Assessment. The purpose of the outreach effort to the co-regulators is to provide an earlier opportunity for discussions regarding the potential technical and assessment approaches, , the most significant precursor issues, and other implementation issues. Additionally, the period between NAAQS proposal and finalization provides a critical window for dialogue on alternate analytical approaches to setting boundaries that can inform boundary recommendation guidance. The proposal of alternatives or ranges for the NAAQS provides opportunity for dialogue regarding the best implementation approaches to balance local and regional precursor contributions.
- Timing: Shortly after the second draft of the Policy Assessment (PA) and the period between NAAQS proposal and final rule.

- b) Issue: As the NAAQS cycles repeat, operating permit updates fostered by the “next” revision take longer and longer to address in the major source operating permit updates. States face the prospect of having to look at whether existing controls (i.e., RACT rules and CTGs) are sufficient to address control strategies that will be needed to meet an updated standard. This is quite critical for NO_x as that pollutant is sometimes addressed in conflicting mechanisms between ozone and PM (e.g., potential need for “RACT-like” control requirement for PM for facilities otherwise exempted from NO_x control for ozone control efforts).

- Success: EPA provides more clarity regarding what emissions reductions will come from regional and national programs versus what will need to come from local controls with potential change to that resulting from a proposed standard. How precursors are to be addressed by either RACT or RACM is identified early. The earlier co-regulator permit writers understand the critical precursor contributions, the earlier new limits will be able to be adopted into operating permit renewals.
- Potential Solution: Develop a means for EPA to vet issues regarding RACT, RACM and PSD implications regarding source size in anticipation of developing NAAQS NSR guidance. Draft guidance at this stage will help state permitting programs ramp up to an earlier 5 year cycle of permitting renewals.
- Timing: Prior to NAAQS final rule.

2) Designations Stage

- a) Issue: After EPA promulgates a new or revised NAAQS, States have limited time/resources to work with local areas and sources to develop boundary recommendations for area designations. Early guidance from EPA would help states refine their scope of work.
- Success: With early guidance from EPA, States can engage their stakeholders early in the process of developing and analyzing area designation and boundary recommendations.
 - Potential Solutions: States and EPA could begin discussing designations guidance shortly after the end of the comment period for a proposed new/revised NAAQS. These discussions could continue after promulgation of the final NAAQS with the goal of assisting the affected state with area recommendations and boundary determinations, preparing analyses to

support area recommendations, and informing boundary considerations for multi-state areas. . Early discussions will also provide States and EPA with a common understanding by which States can develop analyses to support designation recommendations.

- Timing: EPA to initiate discussions shortly after NAAQS promulgation (early assessments begin following the close of the comment period for the NAAQS proposal).
- b) Issue: EPA and States expend too much time and resources with administrative burdens related to reviewing analyses, writing TSDs, and justifying recommended nonattainment areas and boundaries.
- Success: States submit to EPA area and boundary designation recommendations with technical analyses / TSDs that support nationally consistent designation decisions.
 - Potential Solutions: EPA could develop standard templates for States to use when submitting their recommendations and supporting documentation. Standardization would provide states with some transparency into EPA's review process, facilitate EPA's review of states' recommendations, aid states' development of TSDs, and support nationally consistent designation determinations.
 - Timing: At or soon after promulgation of the new or revised NAAQS

3) Implementation and Guidance Stage

- a) Issue: Guidance is often prepared too late in the process, if at all, to be useful to States for SIP development. At times, guidance developed late by EPA is counter to the interpretations and approaches already used by states in their draft SIP submissions which causes States to either

submit SIPs that EPA might not be able to approve or sends States back to the drafting stage which is time and resource consuming.

- Success: SIPs submitted by States are approvable by EPA because they meet EPA's timely and consistent guidance.
- Potential Solutions: Early discussions are needed on considerations related to develop meaningful and timely guidance. General guidance topics are as follows:
 - a. Infrastructure SIPs, including transport guidance.
 - b. Base year emissions inventory (including MVEBs for transportation conformity), future year rate of progress inventories, modeling inventories (Including multi-state areas).
 - c. Identify issues and concerns related to a list of pending/potential national rules, measures and tools, and model rule language.
- Timing: Finalized within one year of the final NAAQS

b) Issue: EPA does not understand States' concerns with modeling and States don't know EPA's modeling expectations. This understanding is needed to inform EPA's modeling guidance.

- Success: Modeling year selection, met data and other technical issues are sorted out prior to the final implementation rule to facilitate getting agreement on approach and a transition to developing a work product.
- Potential Solution: For modeling guidance, early discussions during the development of the proposed implementation rule need to occur. Current processes for early input

from key stakeholders and cross-regional involvement can be improved and are essential to a successful process.

- Timing: Prior or at the time to the final implementation rule.

c) Issue: A wealth of information on control options is available, but spread out among EPA, States, MJOs and others. This information is often not shared which causes States to “re-create the wheel” for each individual planning effort.

- Success: EPA, States, MJOs and other involved in developing controls have access to the most current and relevant control option information.
- Potential Solutions: A coordinated effort to share information between EPA, States and MJOs on control options be undertaken to make all control option information available and avoid duplication of efforts.
- Timing: This needs to happen early in the planning process – immediately after the promulgation of the implementation rule.

4) SIP Development Stage

a) Issue: Avoidance of delays in SIP development due to resolution of national implementation issues.

- Success: Timely resolution of national policy and technical issues needed for national consistency in SIP development.
- Potential Solutions:

i) Develop a system for States to raise SIP and attainment demonstration issues through EPA Regional Offices for EPA's Implementation Work Group to develop an issue paper to facilitate decisions needed from EPA senior management.

ii) Ensure stable commitment of funding support to regional planning organizations for RPOs to provide technical support to states.

iii) Determine the size and extent of nonattainment areas for co-located PM and NOx roadside monitors to aid in determining control strategies for SIPs.

- Timing: Address known issues in the implementation rules and document other issues that arise after implementation rules for inclusion in national guidance.

b) Issue: SIPs are resource intensive to develop and approve.

- Success: Streamline the SIP process to facilitate approvable SIPs and establish a means for paperless electronic submittals of SIPs
- Potential Solution: Develop a SIP checklist for states that identifies the core requirements needed for an approvable SIP.
- Timing: Develop a SIP checklist for the PM NAAQS by the time the PM areas are designate.

5) SIP Submittal and Approval (includes attainment and redesignation)

a) Issue: States are not aware of general requirements that need to be addressed in SIPs or potential approvability issues prior to submitting SIPs to EPA regions.

- Success: The state will submit an approvable SIP revision to EPA by SIP submittal deadline. Issues are elevated early and delays are avoided (i.e., not elevated to dashboard). States will save FTE resources by eliminated delays in the SIP development process.
- Potential Solution: EPA provides guidance and checklists to states (with input from key stakeholders) on minimal requirements for SIP submissions. Regions/states develop timeline and engage in early discussions on key issue areas of SIP. States submit early drafts to regions. Regions engage in meaningful review of early drafts, and HQ/OGC engaged in discussion on approvability issues.
- Timing: Guidance and checklists provided to states one year prior to SIP submission due date. States engage regions as they begin to draft their SIPs.

b) Issue: Regions' approach to address approvability issues is not consistent across regions and nonattainment areas.

- Success: Regions are consistent in the approach they provide to States in terms of addressing issues/concerns across nonattainment areas. EPA regions can approve plans within the statutorily required timeframes and not enter backlog.
- Potential Solution: Develop protocol for EPA workgroups (similar to the elevations process for management) that outlines a process for discussion of issues at the workgroup level to keep SIPs from entering the backlog. Protocol would address how to raise issues early, how to track those issues, and to ensure consistent remedies across regions.

- Timing: Workgroups begin discussing issues as states/regions are drafting SIPs, and would continue through submittal of plan to regions, and as regions conduct approvability.

c) Issue: There is too often unnecessary rework of FR notices and excessive time for OGC review

- Success: Development of quality FR notices with limited OGC review and comment needed
- Potential Solution: Develop templates for SIP Federal Register notices and highlight model examples of good attainment demonstrations and SIP submittals. This could be achieved through sub-teams of the EPA Implementation Work Group.
- Timing: To have a FR notice be approved within two weeks.

● ● ●
Only for internal EPA use and for discussion with the ECOS and NACAA
Membership

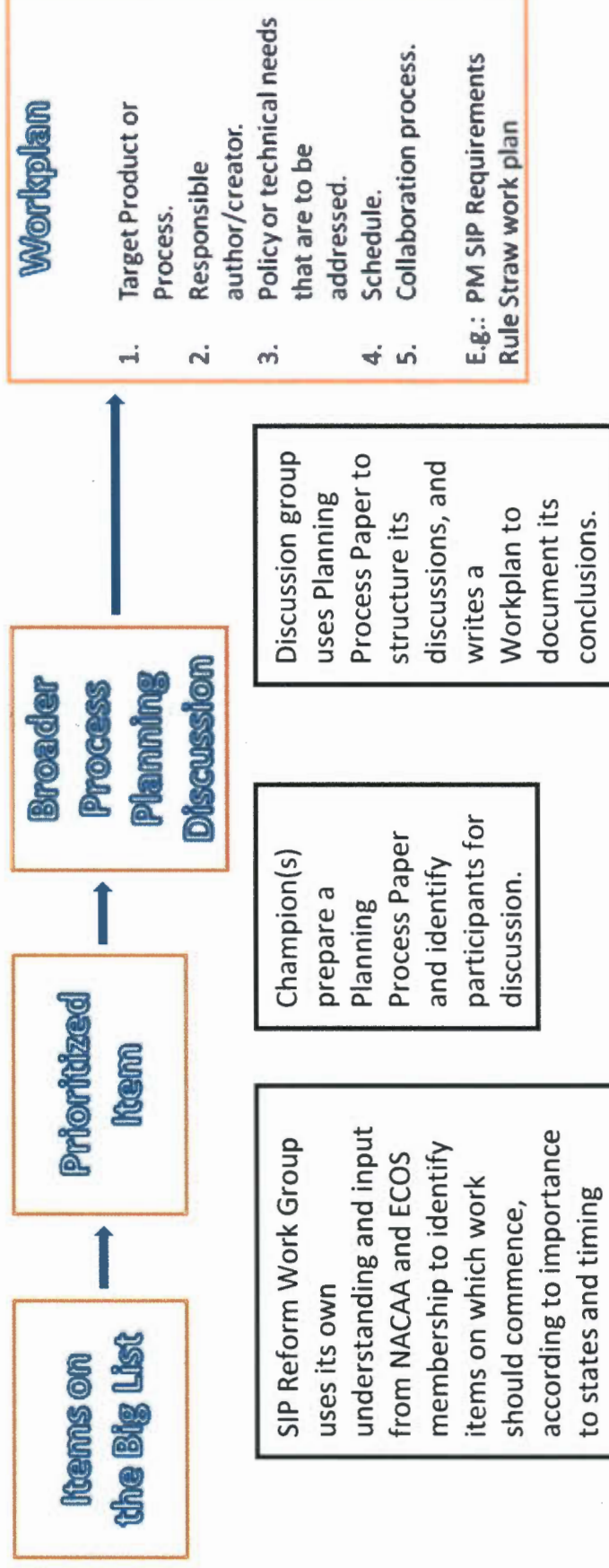
LCAP Process Going Forward

Discussion with the NACAA and ECOS
Membership

August 6, 2012

Moving from Big List to Workplans

A Conceptual Model



PM2.5 NAAQS IMPLEMENTATION MILESTONES AND STATUS OF GUIDANCE/RULEMAKING DEVELOPMENT

Assumptions

1. PSD for the new NAAQS is to be implemented upon NAAQS promulgation; therefore, PSD guidance should be finalized at the time of NAAQS promulgation and include grandfathering where appropriate.
2. Designation recommendations from each Governor are due within 1 year of NAAQS promulgation; and the designations process typically is finalized within 2 years of NAAQS promulgation. Designations guidance ideally should be finalized at the time of NAAQS promulgation.
3. Infrastructure SIPs are due 3 years from NAAQS promulgation; therefore, target date for final infrastructure guidance should be within 2 years of the infrastructure SIP due date (1 year after NAAQS promulgation).
4. Attainment plans for nonattainment areas are due within 36 months from the effective date of designations depending on the NAAQS. Attainment demonstration guidance should be finalized no later than the date of designations for the area.

NAAQS Date of Promulgation	PSD Guidance	Designations			Infrastructure/Transport		Attainment		Other Guidance/Rulemaking
		Guidance	State Recm. Due	Final and Eff. Dates	Guidance	SIPs Due	Implementation/Attainment Plan Guidance/Rulemaking	Demonstrations Due	
July 1997 PM _{2.5}	• PM10 Surrogate Policy issued Oct 1997	Apr 2003	Feb 2004	• Final: Dec 2004 • Effective: Apr 2005			Implementation rule (finalized 2007)		• PM2.5 Modeling Guidance for NSR/PSD Permitting (Mar 2012)
Sept 2006	• PM10 Surrogate Policy ended May 2011 • PM2.5 Modeling Guidance issued on Mar 2010	June 2007	Sept. 2007	• Final: Oct 2009 (most areas) • Effective: Dec 2009	• Infra: Memo issued 2009. • Transport: final CSAPR rule issued in July 2011 for Eastern states.	Sept 2009	• Implementation rule from 2007 also provides implementation framework for 2006 24-hour standard • Supplemental draft guidance memo on 2006 24-hour PM2.5 NAAQS has been reviewed by group of states and final revisions will be made to address comments. Final in Feb 2012.	Dec 2012	• PM2.5 Modeling Guidance for NSR/PSD Permitting (Mar 2012) • Woodsmoke Strategies Guidance (Oct 2009)
Dec 14, 2012	Target: Dec 2012	Target: Jan 2013	Dec 2013	• Final: Dec 2014 • Effective: Early 2015	• Infra: Dec 2013 • Transport: assessing options	2015	SIP Requirements rule: Dec 2014	2018	2020-2025

This document is a straw representation of the purpose and content of a process planning paper. The content of the paper is for illustrative and discussion purposes only and does not presuppose the ultimate content of a paper on this subject.

Life-Cycle Analysis Project

Straw Process Planning Paper on [Issue/NeedTopic]

Purpose of this Process Planning Paper

This planning paper is intended to facilitate a discussion of what deliverable(s) are needed by the states and/or EPA in order to effectively and efficiently address [issue/need topic]. These deliverables may be written products or processes. This planning paper is also aimed at facilitating discussion regarding the needed development and completion schedule for these deliverables. This planning paper also lists options for how the states and EPA can collaborate on the development of these deliverables.

Identification of the Issue/Need

Background Information

Options for Discussion

Possible Target Deliverables and Schedule

- A) [E.g., EPA rule addressing policy issues X, Y, Z]
- B) [E.g., EPA technical guidance document addressing A, B, C aspects of SIP development]
- C)

Collaboration Process Options

- A)
- B)
- C)

Special Notes

Lessons Learned for Future NAAQS

This document is a straw representation of the purpose and content of a work plan. The content of the paper is for illustrative and discussion purposes only and does not presuppose the ultimate content of a paper on this subject.

Life-Cycle Analysis Project
Straw Work Plan for Development of the PM SIP Requirements Rule

Issue/Need

States need a final SIP Requirements Rule by February 2015, which is when designations are effective and is also three years before attainment SIPs are due. There should be pre-proposal opportunities for input from state and local agencies. This rule will need to address the first-ever distinct secondary standard based on a visibility index.

Not included in this work plan: Guidance or rule regarding the 110(a)(1) and (a)(2) requirements.

Background

The recent NPRM for the new and revised PM NAAQS includes proposed rule changes and policies for the monitoring network requirements, the PSD program, and the deadlines for submission of exceptional event demonstrations. It included only EPA's initial thoughts and requests for comment on other implementation issues.

A SIP Requirements rule (and associated guidance) should address the following PM-relevant topics:

- Applicability of (or exceptions to) general 40 CFR part 51 requirements for SIPs
- Classifications (optional for PM_{2.5})
- Revocation of pre-existing NAAQS
- Submittal of State Implementation Plan
- Attainment dates for revised primary and new secondary NAAQS
- Criteria for one-year extensions of the attainment date
- Redesignation to nonattainment following initial designations for the PM NAAQS
- Attainment demonstration and modeling requirements, including the consideration of the effects of natural and other events
- Emission inventory requirements for the PM NAAQS
- Reasonable further progress (RFP) requirements
- Requirements for reasonably available control technology (RACT) and reasonably available control measures (RACM)
- Requirements for mid-course review
- Requirements for contingency measures
- Antibacksliding/termination of requirements under revoked NAAQS (if applicable)
- Any needed changes in general conformity rules (It is assumed that changes to transportation conformity rules if any will take place as a separate action.)
- Any additional changes to PSD and NNSR rules that were not made as part of the final rule establishing the new and revised NAAQS
- Transport to and from other countries
- Clean data findings and suspension of requirements related to attainment demonstrations
- Maintenance plan requirements

See also:

- 40 CFR 51 subpart Z - The implementation rule for the 1999 PM NAAQS (Promulgated April 2007)

This document is a straw representation of the purpose and content of a work plan. The content of the paper is for illustrative and discussion purposes only and does not presuppose the ultimate content of a paper on this subject.

- http://www.epa.gov/ttn/naaqs/pm/pdfs/20120302_implement_guidance_24-hr_pm2.5_naaqs.pdf (March 2012 guidance memo on implementation of the 2006 NAAQS)

Responsible Authoring Organization and Personnel

OAQPS, with support from OTAQ, OGC, and Regional Offices (Region 3 sublead)

Personnel: Rich Damberg, Michael Ling, Phil Lorang, Krishna Viswanathan

Process for Input from State/Local Agencies

An OAQPS-NACAA work group has already been formed at NACAA's request for the purpose of obtaining informed pre-proposal input on this PM2.5 SIP requirements rule.¹

Schedule Expectations

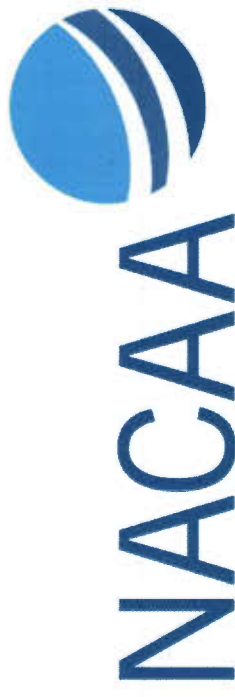
This rule is likely to be designated a significant rule, meaning that senior EPA leadership will provide early guidance and options selection and both formal Final Agency Review and OMB review will be required. The following key milestones reflect this expectation. Planned interactions between EPA and states are listed in italics.

- | | |
|---|----------------------|
| • <i>Organizational call of special workgroup</i> | <i>July 18, 2012</i> |
| • <i>Monthly calls on topical areas</i> | |
| • <i>Conclusion of initial pre-proposal discussions</i> | xxxx |
| • Early guidance from the Administrator | xxxx |
| • Options Selection by the Administrator | xxxx |
| • Draft proposed rule submitted for informal OAR review | xxxx |
| • Draft proposed rule submitted to OMB | xxxx |
| • Signature of proposed rule | xxxx |
| • <i>Live state-EPA discussion prior to close of comment period</i> | xxxx |
| • Close of comment period | xxxx |
| • Final Options Selection by the Administrator | xxxx |
| • Draft final rule submitted to OMB | Oct. 2014 |
| • Signature of final rule | Feb. 2015 |

Special Notes

Lessons Learned to be applied to Future NAAQS

¹ This work group also could be the forum for obtaining input on earlier aspects of implementation including the specific proposals in the NAAQS NPRM, designation issues, and infrastructure SIP requirements. Those issues could be addressed in separate work plans.



national association of clean air agencies

NACAA-ECOS-EPA SIP Reform Workgroup

**Nancy Kruger
Deputy Director
NACAA**

Clean Air Act Advisory Committee, June 8, 2011

What I'll Cover

- ❑ What's the Problem?
- ❑ Mission of the NACAA-ECOS-EPA SIP Reform Workgroup
- ❑ Potential SIP Reforms and Examples of Progress to Date
- ❑ Other Workgroup Initiatives



national association of clean air agencies

What's the Problem?

- What is a SIP?
 - ◆ SIP = State Implementation Plan
 - ◆ A “contract” between a state and EPA including enforceable measures the state has committed to adopt to implement Clean Air Act requirements
- Process for developing, submitting and approving SIPs is inefficient and outdated in many ways
- Critically important for SIPs to be developed and approved in a timely manner
- NACAA, ECOS and EPA decided to work together to address this long-standing problem
- Certainty in implementing these plans is key for regulators and for the regulated community
- We want to spend less time on process and more time on substantive action to clean up the air



national association of clean air agencies

Mission of the NACAA-ECOS-EPA SIP Reform Workgroup

- ❑ Collaborative NACAA-ECOS-EPA initiative established in June 2010 to address long-standing SIP process issues
- ❑ Mission: “To make the SIP process more efficient and effective while ensuring the fulfillment of statutory responsibilities to attain the NAAQS as expeditiously as practicable”
- ❑ Agreed from outset to focus only on measures that do not require Clean Air Act changes
- ❑ Three main initiatives
 - 1) Potential SIP Reforms
 - 2) State-Local Toolkit
 - 3) Enhanced Federal Measures

Workgroup Members

- Workgroup members include NACAA, ECOS and EPA representatives from

Sacramento, CA
Linn County, IA
Kentucky
Maryland
New Mexico

Nevada
New York
Ohio
South Carolina
Wisconsin

EPA HQ
EPA Regions (III & VII)
ECOS HQ
NACAA HQ

Potential SIP Reforms

- ❑ Workgroup discussed what SIP process improvements are necessary and achievable under the Clean Air Act
- ❑ Began with the 2005 recommendations of CAAAC's Air Quality Management Workgroup to transform the SIP process
- ❑ Also reviewed recommendations from states and localities and EPA HQ and regional staff
- ❑ Developed a list of the 13 highest-priority potential SIP process reforms

Potential SIP Reforms – List of 13

- 1) Timely issuance of guidance
- 2) No unnecessary documentation for redesignation and maintenance plan submittals
- 3) Regional approaches to SIP planning
- 4) Increased use of WOE
- 5) Alignment of SIP submittal dates
- 6) Improved communications
- 7) Protocol/checklist for attainment SIP development
- 8) Letter approval for minor SIP revisions
- 9) Simplified reporting for innovative and voluntary measures
- 10) Training
- 11) State determination of how to seek public comment on SIP amendments
- 12) Electronic SIP submittals
- 13) Online database/tracker of approved SIPs and SIP submittals



national association of clean air agencies

Potential SIP Reforms – Examples of Progress to Date

- ❑ Streamlined SIP submittal requirements
- ❑ More flexibility for states in determining how to notify and seek comments from the public on SIPs
- ❑ Increased understanding by EPA of states' need for timely guidance
- ❑ Online resource for tracking the status of SIPs: EPA's SIP Status & Information Website at www.epa.gov/urbanair/sipstatus

Other Workgroup Initiatives

- State Local Toolkit
 - ◆ Compilation of SIP “best practices” from across the country that have been demonstrated to reduce the time and resources historically associated with state and local SIP preparation and EPA approval.
- Example: SIP Kaizen Process (aka Lean SIP Process)
 - ◆ Reduce total time of the SIP process
 - ◆ Eliminate unnecessary process steps
 - ◆ Cut the number of decisions to be made along the way
 - ◆ Address the SIP backlog and avoid creating a future backlog

Other Workgroup Initiatives (cont.)

- Enhanced Federal Measures
 - ◆ Pursue development and promulgation by EPA of effective federal measures to reduce ozone, particulate matter and their precursors; explore the viability of other national strategies from which states and localities could benefit.

Questions?

Nancy Kruger
NACAA

nkruger@4cleanair.org
(202) 624-7864

NACAA-EPA Group on
2012 PM NAAQS Implementation Issues
Issue Paper Template

Issue: Designation Process: There needs to be more consultation when EPA disagrees with a State's nonattainment boundary recommendation. The criteria for adding counties with attaining monitors, or adding outer counties with no monitors, is too subjective.

Background: The EPA defines consultation in Step 4 of its *Guidance to Regions for Working with Tribes during the National Ambient Air Quality Standards (NAAQS) Designations Process*; ¹ "Consultation is generally defined as a process of meaningful communication and coordination between an EPA representative who is considered a decision-maker for the Agency (the Associate Division Director or above) and tribal officials or their designees." The EPA further explains this as an opportunity "to engage in a *technical dialogue* [emphasis added] regarding the recommendations." Step 10 of the same memo goes on to state, "When requested, consultation should be conducted after the 120-day letter is sent. This is especially important where a tribe disagrees with EPA's intended designation."² While States and Local Agencies are not Tribes, the same principles should apply.

Some states have just come through the ozone designation process and believe that consultation with the Region office was lacking. Regions seem unwilling to share why they made the decisions they made because it is part of a "deliberative process."

A nonattainment area is defined in Clean Air Act (CAA) section 107(d)(1)(A)(i) as "any area that does not meet (or that contributes to ambient air quality in a nearby area that does not meet) the national primary or secondary ambient air quality standard for the pollutant". The Clean Air Act makes "air pollution prevention . . . and air pollution control...the primary responsibility of States and local governments³." Even though the Clean Air Act gives EPA the authority to set NAAQS and to make nonattainment designations, the Clean Air Act gives states the responsibility to make recommendations on which areas are designated nonattainment and to develop and implement the SIPs that bring areas into compliance with the NAAQS.

Potential Options:

1. Provide clearer guidance on the meaning of "contribute" in CAA Section 107(d)(1)(A)(i). The word "contribute" in CAA Section 107(d)(1)(A)(i) is ambiguous.⁴ EPA has never defined or established a bright line test for what is considered to contribute to a nonattainment area and courts have shown great deference to EPA's judgment in this regard. As a result, EPA could find that any single source (or geographical area of small sources) could contribute to remote violations and, thereby, justify virtually any non-attainment area.

¹ Page 4, of the EPA Memo, *Guidance to Regions for Working with Tribes during the National Ambient Air Quality Standards (NAAQS) Designations Process*, December 20, 2011

² Id. Page 5

³ CAA section 101(a)(3). See also CAA section 107(a).

⁴ David Flannery, DC Circuit Upholds US EPA's PM 2.5 Nonattainment Designations, July 17, 2009.

- a. A reasonable interpretation of “contributes to” in Clean Air Act section 107(d)(1)(A)(i) would be that inclusion of an area that currently is in compliance⁵ with the standard as part of the nonattainment area is necessary because it would have a material impact on the nonattaining area’s ability to comply with the standard. Otherwise, the nonattainment designation is in effect a punishment with no real environmental protection.
 - b. The use of sensitivity analyses on a county by county basis could be done to assess a counties impact on a nearby nonattaining county.
2. Make more of an effort to communicate to the State why the decision was made regarding the boundary when that decision differs from the State’s recommendation. Use the full time allowed under the law (or consent decree) before finalizing a boundary the differs from a State’s recommendation.

Summary of Discussion: *[after the group completes its discussions of the issue, we can add a summary of key points raised during those discussions]*

⁵ Or has no monitoring data.

Appendix D
Department of Health and Environmental Control
Form Approval
&
Clean Air Act Designation Survey



Application for Forms Approval, Revision or Deletion

1) I want to:

☒ **Create a form.**

(a) Form custodian: (Custodian is the person who created the form)

Name: Maeve Mason

Phone: 803.898.2230

Program, region or work area: BAQ, Regulation & SIP Management

(b) Title of proposed form: CAA Designation Process Survey

(Next, complete sections 2-9)

☐ **Revise a form.**

Number: _____ Title: _____

(Next, complete sections 2-9)

☐ **Delete a form.**

Number: _____ Title: _____

(Next, provide the reason for the deletion in item 2 then sign and date item 9.)

2) Justification: (Explain the purpose of the new form or the reason for the form revisions or deletion. Include any applicable state, federal, program or discipline requirements for creating this form.)

This form/survey is being used to collect information from neighboring State Agencies with regard to their experience with the CAA Designation Process. The information will be shared among participants and is being used to provide insight to the Regional Planning Organization and Air Directors in an effort to ultimately improve communication with EPA Region 4.

In addition, this information will be used as a means to collect data associated with a Certified Public Manager project per the requirements of the credential.

3) The Family Privacy Protection Act of 2002 **requires** that we do not collect personal information beyond that which is necessary to fulfill our duties. Is this form in compliance with this Act?

☒ Yes ☐ No

4) This is a:

☒ **Common form** (Used by agency staff or the general public)

☐ **Classified form** (Use by agency staff **only** or by a specified authorized individual)

5) Will the form be filed in the client's DHEC health record?

☐ Yes ☒ No

6) Order/Retrieve forms from:

☐ Central Supply (if $\geq 20,000$ copies used per year)

☐ Program area

☐ Region

☒ **RIMS** (Records Information Management System)

File on: ☒ Internet (www.scdhec.gov) ☐ Intranet (dhecnnet)

☐ Other (Specify: _____)

7) For **revised** forms, users should:

☐ Deplete existing supply, then use the revised forms.

☐ Recycle any unused forms and use the revised forms.

8) Do you need the form translated into Spanish?

☐ Yes ☒ No

9) Submitted by:

Name: Maeve Mason

Phone: 803.898.2230

Date: 10/16/2012

(Note: See item 10 (pg. 2) for other items that **must be** included.)

Records and Forms Management Office:

Approved: ☒ Yes ☐ No

APPROVED

Stamp: By Cristi Horne at 3:08 pm, Oct 16, 2012

10) Include with this application (DHEC 2204):

- a) An electronic copy of the form
- b) Instructions for completing the form

*Instructions **must include:***

- **Title** of form
- **Purpose** of the form
- **Who will complete** the form
- **Item-by-item instructions** for completing the form
- **Office mechanics and filing** (where the completed form is filed, the retention schedule that governs how long DHEC must keep the form and if copies are made, where are they filed?)

- c) A DHEC 0149 (Art/Graphics/Printing Work Order) if the Art Department will be designing the form for you.

Form submittal:

Email this application and above information to:
Cristi Horne (hornebcm@dhec.sc.gov)

Process:

1. Cristi notifies you once your form has been approved.
2. Cristi forwards the paperwork to the art department if they'll be designing the form.
3. The art department sends you a proof of the form for review and approval.
4. Cristi loads a PDF of the approved form to RIMS ***unless you specify otherwise.***

Clean Air Act Designation Process

Please provide a response to each of the questions provided. Once the data has been collected and analyzed, we would be happy to share the results. Please complete the survey within 2 weeks of the date you received. Thank you!

DHEC Form 0430 (10/2012)

Clean Air Act Designation Process

***1. Does your state or local air program submit the initial designation recommendation (following promulgation of a new or revised National Ambient Air Quality Standard) on behalf of the state's Governor?**

☐ Yes

☐ No

☐ Other (please specify)

***2. Does your state or local air program take primary responsibility for developing the recommendation?**

☐ Yes

☐ No

If not, who does or is involved?

Clean Air Act Designation Process

***3. Has your state ever accepted the EPA's presumptive nonattainment area boundary?**

- ☐ Yes
- ☐ No
- ☐ Not Sure

If Yes, why? What were the circumstances?



***4. Based on your experience, is 120 days sufficient time to respond to EPA's proposed modification to your recommended nonattainment area boundary?**

- ☐ Yes
- ☐ No

If No, how much time would be sufficient?



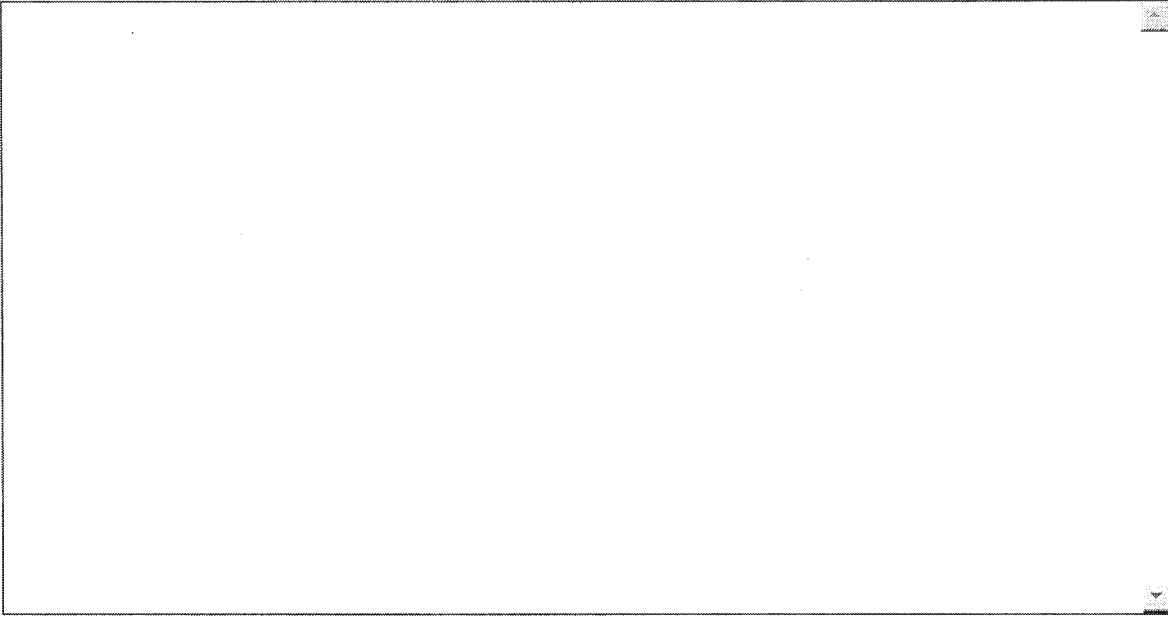
Clean Air Act Designation Process

***5. In your experience, do you feel as though the current designation process is effective?**

☐ Yes

☐ No

Please explain your response. If No, how do you believe the current process can be improved?



***6. During the 120 day process prior to final designations, please indicate how often you communicated with EPA using the following methods?**

Phone

Number of Times

Face to Face

Email

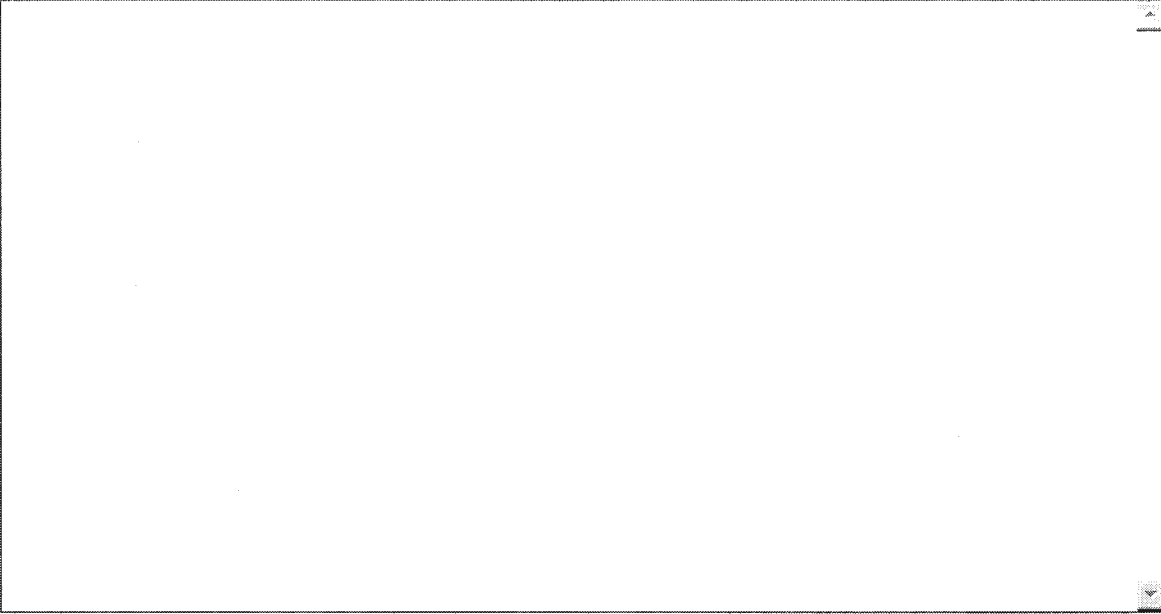
Clean Air Act Designation Process

***7. Has your state or local air program ever petitioned the EPA and/or Court to reconsider a designation decision?**

☐ Yes

☐ No

If Yes, why? What were the circumstances?

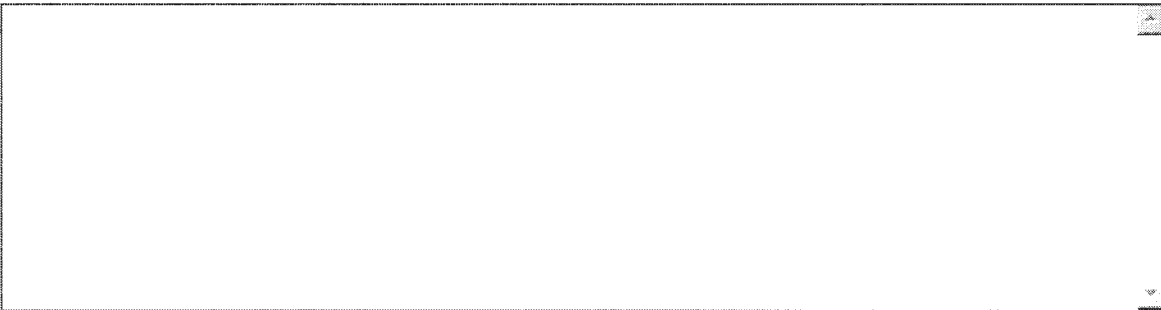


***8. Has your state or local air program ever been asked to submit a maintenance plan (pursuant to CAA Section 110(a)) in order to be redesignated from "unclassifiable" to "attainment"?**

☐ Yes

☐ No

If Yes, did you submit a maintenance plan?



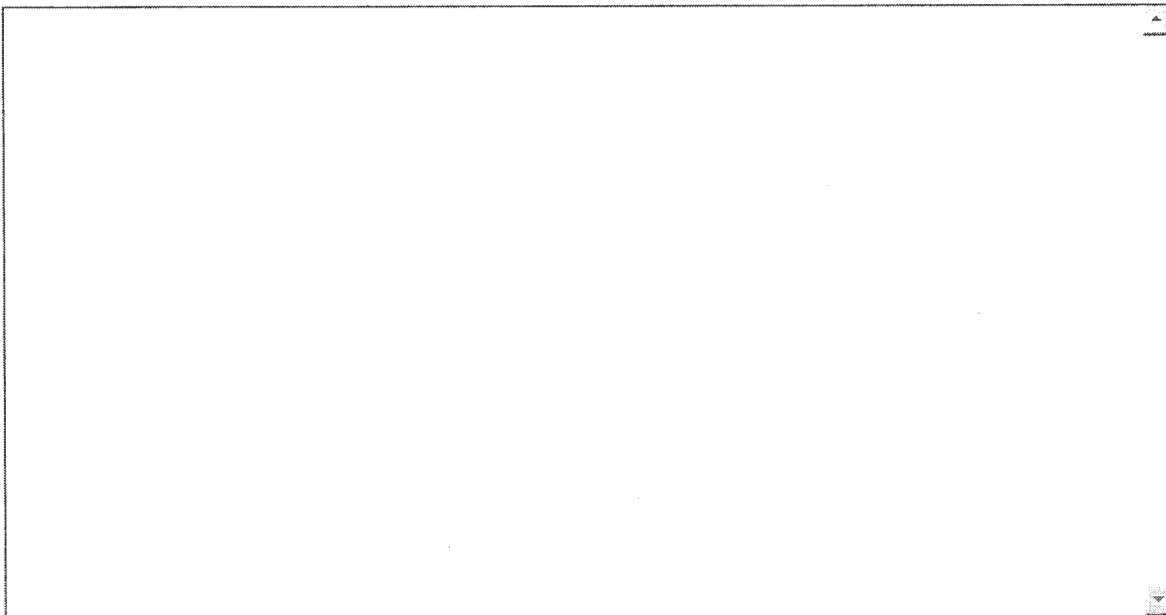
Clean Air Act Designation Process

***9. Has the EPA ever taken longer than 18 months to either approve or deny a redesignation request (see CAA Section 107(d)(3)(D)).**

☐ Yes

☐ No

If Yes, how long? What was the outcome of this delay?



***10. Please provide any other thoughts, issues, concerns, or perspectives related to the designation process?**

